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January 21, 1957

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President Asks More Funds For FDA Enforcement, Control Of Pollution, Medical Study

An increase of 23 percent in funds for enforcement work of the Food and Drug Administration, increases of 50 and 57 percent in air and water pollution control activities of the Public Health Service, and a further increase in funds of the National Institutes of Health for medical research were called for by President Eisenhower in the budget sent to congress last week for the Department of Health, Education and Welfare for fiscal 1958. If congress approves, the FDA will get $10,554,500 in the new fiscal year starting next July 1, an amount far greater than it has ever received in history.

More Than Present Allowance

The amount proposed is $2,575,500 more than was allowed for the current fiscal year, and represents the second stage of the expansion program recommended by the citizens advisory committee in 1955.

HEW said that the 1958 budget reflects the need for strengthened programs to assure the safety of foods and drugs in the light of unprecedented growth in the volume and complexity of these products. It is estimated that the number of establishments inspected will be stepped up from 14,100 to 16,700, with a corresponding increase of about 12 percent in the number of samples collected for analysis by the FDA laboratories.

The proposed program emphasizes basic scientific research on new problems of food and drug protection. The research would include:

- Development of new methods of detecting and measuring residues of pesticide chemicals and food additives.
- Studies of the effects of such materials on laboratory animals.
- Bacteriological studies on pre-cooked foods and frozen foods.
- Research on protein quality of foods and the effects of heat and radiation processing on the nutritional qualities of food.
- Reappraisal of some of the official testing methods for drugs.

HEW added that additions to the staff of the bureau of medicine would enable

—Continued on page 67

ARMOUR'S CHEMICAL HEAD: Edward A. Coons, named general manager of the Armour & Co. chemical division, Chicago, succeeding John M. Hoerner who has been appointed assistant general manager of the firm's auxiliaries group.

Neville Research Is Being Expanded

Neville Chemical Company will spend $750,000 to double its Pittsburgh, Pa., research facilities. Lee V. Dauler, Neville president, announced today that a $600,000 air-conditioned building will go up on his company's fifty-acre Neville Island tract and another $150,000 will be spent on new laboratory and office equipment.

Mr. Dauler said the expansion also will mean a 50 percent increase in Neville Chemical's research staff. He added:

"The new Neville Island installation is part of an overall expansion program begun five years ago. The new laboratory will accelerate our research for new products and chemicals, which we hope to develop from the same basic materials we have used in the past. It will also enable us to give expanded and improved technical service to our customers."

Mellon-Stuart Company, Pittsburgh contracting-engineering firm, already has started construction on the new two-story brick building which will contain 31,000 square feet of floor space. It is located near the company's main plant.

Two-thirds of the building will be devoted to laboratory facilities and the remainder to administrative offices. It is scheduled for completion late this summer.

Air Pollution Control Bill Offered in New York State

New York State's joint legislative committee on natural resources wants a board set up with wide powers to enforce air pollution regulations outside of New York City.

The committee, in a bill presented last week, would create an eleven-man air pollution control board within the state's health department.

New York City was excluded from the proposal because it has its own pollution control unit and the city's problems are now under study by the Interstate Sanitation Commission.

Because of the drastic provisions contained in the legislation, hearings are scheduled for the next two weeks in Buffalo, Syracuse, Albany and White Plains.

The eleven-man board would be made up of the state Commissioners of Health, Agriculture and Markets, Commerce, Conservation and labor, and six members named by the governor.

Under the bill, the board's orders would be subject to court review.

Hooker's Oldbury Division Is Now Losing Its Identity

Integration of the former Oldbury Electro-Chemical Company into Hooker Electrochemical Company, Niagara Falls, N. Y., has been proceeding very satisfactorily, according to an announcement last week by Bjarne Kaussen, president.

The designation "Oldbury Division," which was used on a temporary basis, will now be discontinued, he said, but the name and trademark of Oldbury will be retained in active use as "Oldbury Products." Oldbury, founded in 1896, was consolidated into Hooker on November 30, 1956.

"Oldbury Products" will identify the chemicals produced in the former Oldbury plants, located at Niagara Falls and Columbus, Miss. "Oldbury Products" include phosphorus, phosphorus compounds chlorates, perchlorates, oxalic acid, and perchloric acid.

PENICK VICE-PRESIDENT: Frank Seeland, manager of the agricultural chemical and insecticide division of S. B. Penick & Co., New York, who has been elected a vice-president of the company.

Morpholine Output Slated for Big Boost

Designed to keep pace with the booming demand for morpholine, Carbide & Carbon's planned expansion for morpholine facilities at South Charleston, W. Va., will double capacity there and substantially increase national output, according to an announcement by E. E. Fogle, vice-president of Carbide & Carbon Chemicals Company, New York, a division of Union Carbide & Carbon Corporation.

Carbide said it was the first to make morpholine commercially and is the largest producer today. The expansion of the company's facilities, designed for comple-

—Continued on page 60

DuPont Polychemicals Unit Buys Louisiana Plant Site

E. I. duPont de Nemours & Co., Wilmington, Del., has exercised an option to buy a plant site of approximately 600 acres on the Mississippi River between New Orleans and Baton Rouge, La.

The site is known as the Belle Point Plantation. The option was granted by Gulf States Land & Industries, Inc., an affiliate of the New York real estate firm of Webb & Knapp, Inc., to duPont's polychemicals department.

Gen'l Aniline's 'For Sale' Sign Posted by Gov't

Although it may be quite some time before a deal is closed, the government last week hung out a "For Sale" sign on its majority holdings in General Aniline & Film Corporation, New York.

The decision to sell its GAF stock to the American public came to light when the government filed a registration statement with Securities and Exchange Commission.

Government plans to rid itself of General Aniline, long in the making, have been delayed by eight years of almost continuous court fights over ownership of the big chemical firm.

That the end of this litigation is not yet in sight was indicated by attorneys representing Interhandel, the Swiss holding company, and two groups of stockholders, who said they are prepared to fight the proposed sale "in every appropriate tribunal."

Argument Advanced by Interhandel

They contend that the sale of the GAF shares is contrary to a federal law "which forbids the Alien Property Office to change the status of vested property while litigation is pending."

The government decided to file the registration statement with SEC after the State department earlier had rejected a request by the Swiss government that the question of General Aniline ownership be submitted to international arbitration.

State's position is that Switzerland has no basis for demanding arbitration of the ownership question when a direct or indirect German interest is asserted.

The registration statement, filed for the government by Attorney General Herbert Brownell, covers the proposed sale of 426,988 shares of GAF common A no-par stock and 1,537,500 shares of common B ($1 par value).

The government is the record holder of 540,894 common A shares, which represents 91.25 percent of the outstanding stock of this class. It also holds all of the outstanding class B common totaling 2,050,000 shares.

Mr. Brownell advised SEC that a maximum of 70,344 shares of the common A and 316,500 shares of the common B may be subject to claims of stockholders of I. G. Chemie, the former name of Interhandel.

The stockholders of I. G. Chemie (or Interhandel) are suing the government for their proportionate share of General Aniline in actions separate from the Interhandel suits that were finally disposed of last year.

The stock being offered for sale by the government will be disposed of on an all-or-none basis to the highest bidder. The date when the sale is to be held was

—Continued on page 60

Vitamin A Dose Limitation Is Recommended to FDA

A panel of medical experts meeting with Food and Drug Administration last week recommended that over-the-counter sales of vitimin A preparations be limited to products containing not more than 50,000 units per daily dose.

The meeting was cal'ed by the division of medicine of FDA because there has been a tendency in the trade in recent years to increase the vitamin A content of preparations above a level of known safety when taken daily. Excessive amounts of vitamin A can prove to be toxic, it was explained.

It was the unanimous decision of the panel, made up of the medical directors of pharmaceutical manufacturers as well as outstanding authorities in the pediatrics field, that a ceiling of 50,000 units daily should be placed on preparations

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Fuel From the Farm Is the Aim of Nebraska Legislation

The government's big grain alcohol plant at Omaha, Neb., which was built during World War II to supply feed stock for the synthetic rubber program, may be turned over to the Department of Agriculture to serve as a center for research on motor fuels made from surplus farm commodities, according to the terms of one of the many bills affecting the chemical industry that were submitted to congress last week.

Legislation has been introduced in the senate by Sen. Roman L. Hruska and Sen. Carl T. Curtis of Nebraska to transfer the grain alcohol plant to the department, and has been referred to the senate committee on government operations for consideration. The bill is S 581.

The plant has a designed capacity to produce 22,750,000 gallons of alcohol a year, but has been operated only intermittantly since the war when the market for alcohol as the raw stock for making butadiene for synthetic rubber production was gradually taken over by the petroleum industry. The plant is now in standby condition under the supervision of General Services Administration.

A broad program of research on new industrial uses for agricultural products is being drawn up at the present time by a special commission appointed by the President under last year's soil bank and farm aid law, and the two Nebraska senators are hopeful that the Omaha plant can be fitted into this program.

The conversion of farm crops into motor fuel additives has long been the dream of the midwest legislators and farm groups and the senators are proposing that the Omaha plant be used to develop the know-how to make this goal economically feasible.

Other bills introduced last week, listed alphabetically by subject, included:

Agreements—S 603 by Sen. William F. Knowland of California, to require that international agreements other than treat-

—Continued on page 70

Texas City Chemicals Starting 'Dikal' Output

"Dikal" dicalcium phosphate, produced by Texas City Chemicals, Inc., under the management of Coronet Phosphate Company, will commence moving from Texas City, Tex., on a continuous basis early next month.

The product will be sold by the Coronet sales organization. Coronet is a division of Smith-Douglass Company, Norfolk, Va.

Hydrocortisone Ointment Stand Reversed On Lack of Evidence

Food and Drug Administration last week reversed its former position and decided against permitting over-the-counter sales of ointments and lotions containing hydrocortisone and hydrocortisone acetate. The agency based its ruling on the grounds that available evidence fails to show that these drugs are safe for use without medical supervision. Ten pharmaceutical firms had petitioned FDA to exempt the drugs from the prescription dispensing requirement, and a proposed order to this effect had been published in the *Federal Register* on January 20, 1956. It was challenged by members of the medical and pharmaceutical professions and a public hearing was called to receive further evidence.

Conflicting Evidence Received

At the hearings, conflicting evidence was received relative to the amount of absorption of the hydrocortisone through the skin and the clinical significance of such absorption. In its ruling summarizing the available evidence, FDA said:

1. The evidence supporting the proposed exemptions, including evidence contained in new-drug applications, indicated that:

a. Hydrocortisone and hydrocortisone acetate are not absorbed through the human skin when ointments and lotions containing the drugs are applied to the skin.

b. No systemic effects of hydrocortisone have been observed clinically in the course of extensive use under medical supervision of ointments and lotions containing hydrocortisone and hydrocortisone acetate.

c. Hydrocortisone and hydrocortisone acetate ointments and lotions have been used extensively under medical supervision, without reports of any significant adverse reactions.

d. Such preparations are effective and useful in the treatment or alleviation of many minor skin irritations.

2. The evidence opposing the proposed exemptions, including reports of studies conducted after publication of the proposed exemption order, indicated that:

a. Studies by newly devised laboratory procedures on small numbers of human subjects showed absorption of varying amounts of hydrocortisone and hydrocortisone acetate through the skin and through

—Continued on page 70

RESIN SALES MANAGER: R. E. Vidal, elevated by Dow Corning Corporation, Midland, Mich., from assistant manager of leather industry sales to manager of resin sales.

Cokeoven on Taiwan To Get Aid From ICA

Pioneer Chemical Corporation, a private Chinese firm on Taiwan, plans to build a cokeoven to provide coke for the manufacture of fertilizers and calcium carbide, and for use in blast furnaces and foundries.

Plans for the cokeoven were announced last week by the International Cooperation Administration, which will finance construction of the $3 million horizontal-type partial byproduct installation.

Curran Carbonizing & Engineering Company, St. Louis, Mo., has been selected by ICA to provide the engineering designs, to act as procurement agent for plant equipment, and to provide supervisory personnel for the construction, initial operation of the plant, and the training

—Continued on page 47

Rohm & Haas Appoints

Appointment of Arthur L. Blount, vice-president, as manager of its Philadelphia plant has been announced by Rohm & Haas Company. The appointment coincides with the retirement of C. E. Andrews, also a vice-president, who had served as plant manager since 1941. Paul D. Grubb has been named assistant plant manager and production manager.

Radioactive Drug Rules Being Amended By FDA

Food and Drug Administration has moved to amend its regulations covering new drug preparations for investigational use to exempt shippers of radioactive drugs from the requirement that they obtain a signed statement from the expert investigator in cases of shipments that have been authorized by the Atomic Energy Commission, through its licensing system.

The new drug regulations exempt all preparations shipped for investigational use from the labeling and other requirements of the law only when the shipper has a statement signed by the expert that he has adequate facilities to conduct the investigation and that the investigation will be done under his direction.

Persons interested in the proposed exemption of radioactive substances from this requirement are given thirty days to submit their comments to FDA.

The Week's Price Changes

Corn Starch and Syrup, Divi Divi, Argentine Casein Rise. Dioctyl Phthalate and Manila Copal Gum Decline.

Prices Advanced

Amyl acetate, tech., dist., 125° to 150°C, ½c. per lb. (p. 46).
Blood, New York, 50c. per unit-ton (p. 43).
Casein, imp., Arg., ½c. per lb. (p. 61).
Corn, dextrin 5c. per 100 lbs. (p. 51).
Starch, 5c. per 100 lbs. (p. 51).
Sugar, tanners, 6c. per 100 lbs. (p. 51).
Syrup, 42 Be., 5c. per 100 lbs. (p. 46).
Divi divi, $2 per ton (p. 51).
Gum, dammar, East India, black, nubs and chips, ½c. per lb. (p. 61).
Linseed meal, $1 per ton (p. 65).
Oil, cottonseed, crude, ½c. per lb. (p. 65).
refd., ½c. per lb.
Ginger, $1.50 per lb. (p. 58).
Sassafras (artificial), 2c. per lb. (p. 58).
Soybean meal, $5 per ton (p. 65).
Stearates, 2c. per lb. (p. 61).
Tankage, New York, 25c. per unit-ton (p. 43).
Chicago, 25c. per unit-ton.
Tin, 3⅛c. per lb. (p. 38).
Salts, 4/10c. to 1½c. per lb. (p. 38).

Prices Reduced

Cocoa butter, 2c. per lb. (p. 65).
Copra, $4 per ton (p. 65).
Dioctyl phthalate, ½c. per lb. (p. 61).
Gum, copal, Manila C and DBB, ¾c. per lb. (p. 61).
Molasses, New Orleans, ½c. per gal. (p. 46).
Oil, castor, No. 1, Braz., ¼c. per lb. (p. 65).
Coconut, crude, ¼c. per lb. (p. 65).
Peanut, crude, ½c. per lb. (p. 65).
refd., ½c. per lb.
Tung, ¼c. per lb. (p. 65).
Wax, bees, crude, 1c. per lb. (p. 65).
Carnauba, yellow Ceara, 5c. per lb. (p. 65).
Parnahyba, 2c. per lb. (p. 65).
Japan, 1c. per lb. (p. 65).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:—

(100=1949 average)

Jan. 18, 1957	Jan. 11, 1957	Jan. 20, 1956
111.01	110.78	107.47

Packaging Exposition Planned

A 30 percent increase in the size of the packaging industry in the next five years was predicted last week in New York by the packaging division of the American Management Association in conjunction with its announcement of National Packaging Week April 8-11. The principal activities scheduled for that week will be the twenty-sixth annual AMA National Packaging Exposition and National Packaging Conference in Chicago. Attendance of well over 1,200 specialists in packaging, shipping, traffic management, materials handling, and merchandising is expected at the conference while some 30,000 executives from more than 9,000 different companies will view the exposition.

Over 90 Percent of Space Reserved

With the show almost three months away over 90 percent of the available 133,000 square feet have been reserved. The full capacity of the Exposition Hall and South Hall of Chicago's International Amphitheatre will be taken up to illustrate the broad scope of the packaging industry, including aerosol packaging in complete production line for the first time at any industrial exposition.

John Warren, technical adviser of AMA's packaging division, said that the nation's present packaging bill of some $10 billion annually will rise to $13 billion by 1962. During that period packaging's share of the gross national prod-

—Continued on page 71

Solvay Promotes Managers At Chlorine-Caustic Plant

Robert B. Lautner has been named manager of the Moundsville, W. Va., chlorine-caustic soda plant of Solvay Process Division of Allied Chemical & Dye Corporation. He succeeds W. E. Dugan, jr., who died suddenly December 28th.

Mr. Lautner's post as assistant manager has been filled with the appointment of John L. Rourke, superintendent of electrolytic operations at Solvay's Syracuse, N. Y., plant.

UNGERER SALES MANAGER: Roy Hagelin, formerly in charge of citrus oil sales and technical services for Sunkist Growers, Inc., who has become sales manager of Ungerer & Co., New York.

DDD Tolerance Approved

Food and Drug Administration has approved a tolerance of fifteen parts per million for residues of the pesticide chemical diethyl diphenyl dichloroethane on certain raw vegetables.

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IN KEY S-W PURCHASING POSTS: W. D. Mitchell (left), named an assistant director of purchases for Sherwin-Williams Company, Cleveland, Ohio, in charge of procurement of pigments, chemicals and tin mill products. A. J. Millavec (right), appointed an assistant director of purchases for Sherwin-Williams responsible for purchases of all paint, varnish and lacquer raw materials with the exception of pigments.

Carbide Will License Patents On Three Measuring Instruments

D. B. Benedict, president of Carbide & Carbon Chemicals Company, New York, a division of Union Carbide & Carbon Corporation, has announced the availability for licensing of Carbide patents which cover three new instruments for automatically measuring streams of gases and liquids in production processes. Mr. Benedict said, "Until now many gas and liquid production streams have been analyzed by skilled technicians, often by time-consuming laboratory methods. Our instruments make it possible to analyze streams continuously, so that quantitative changes in constituents are immediately recorded and controlled. Process operation and quality of product will be greatly improved by these instruments which represent additional forward steps in the direction of process automation."

V. P. OF NUCLEAR FIRM: Adolph Q. Lundquist, appointed a vice-president of Union Carbide Nuclear Company, New York, a division of Union Carbide & Carbon Corporation.

What Three Instruments Are

The instruments are a chromatographic analyzer, a differential refractometer and an electrolytic concentration cell. Carbide is now using them in its own plants and will license instrument makers to produce and sell them to industry.

"The chromatographic analyzer is an instrument that can have wide application, not only in the chemical industry," Mr. Benedict said, "but in all process industries, including oil refining, steel production, brewing, perfume formulating, food processing and even in municipal sanitation systems. It is Carbide's policy to license its new instruments for use outside the company, rather than retain them solely for Carbide's own use. We feel that in a sense such technical developments should be available for general use."

The chromatographic analyzer can analyze for one or more components of many mixed gas streams heretofore considered too difficult for plant instruments. This analysis is obtained by passing a sample of the mixture through a packed tube. Here the components are separated. The percentage of each gas in the mixture is then registered automatically.

The usual method of measuring gas components until now has been to take

—*Continued on page 63*

Atlas Breaks Ground For Technical Center

Atlas Powder Company last week broke ground for a $3 million technical center which will enable the company to intensify its long-range basic research program, as well as to expand its technical service to the chemical industry.

The new center will be located adjacent to the company's general offices in a suburban area near Wilmington, Del. It is scheduled for completion by the end of this year.

Ralph Gottshall, president, said the new technical center is the latest step in the current expansion of the Atlas research and development program, which includes an intensification of long-range research as well as applications research and customer service. Within the next

—*Continued on page 67*

Reichhold Associated Firm Building Manila Resin Plant

Reichhold Chemicals, Inc., White Plains, N. Y., has announced that Resins, Inc., is building a plant in Manila, P. I., for the manufacture of synthetic resins. This associated company will operate the plant under license from RCI using its technical knowledge and processes.

The new plant will produce resins for the paper, textiles, surface coatings, furniture and lumber industries in the Philippines. Plant capacity, initially, is expected to be 6 million pounds annually.

Fluorspar Water Fluoridation A Cloud in Silicofluoride Future As PHS Develops Dissolver

A device developed by two Public Health Service scientists to reduce the cost of fluoridation of city water supplies promises to have great impact on future market patterns for sodium silicofluoride. The equipment is a dissolver which makes it possible to use fluorspar, the least costly form of fluoride. It was developed by F. J. Maier, sanitary engineer director, and E. Bellack, chemist, of the PHS division of dental public health. Present cost of adding fluoride compounds to water, according to the agency, averages 10 cents per person per year in most sections of the country. The new dissolver, it is claimed, could cut the cost per person to about 3 cents a year.

Sodium silicofluoride is used widely today—in such cities as Buffalo, N. Y.; Miami, Fla.; Little Rock, Ark.; Toledo, Ohio, and Nashville, Tenn.—because of its easy solubility in water. This makes it readily controllable.

Where Sodium Fluoride Is Used

Sodium fluoride, one of the original chemicals used in fluoridation, is still used by such municipalities as Grand Rapids, Mich.; Newburgh and New Rochelle, N. Y.; New Britain, Conn., and Charlotte, N. C., also because of its high control qualities.

Previously, it was not practical to use fluorspar in water supplies, despite its lower cost, because it does not dissolve readily.

With the new piece of water works equipment developed by the PHS men, the fluoride in fluorspar reportedly becomes available in the presence of aluminum sulfate, a chemical presently used in many water plants to clarify water.

After an alum solution has dissolved the fluorspar, it is fed into the water by a solution feeder, a machine commonly used in water treatment processes.

The new dissolver, which has been field-tested for more than six months, is not yet on the market, but its manufacture by private industry is expected to begin in the near future.

Consensus among producers of fluorides is that sodium silicofluoride sales could be dealt a considerable blow in the future by widespread acceptance of the new

—*Continued on page 41*

Hydrogen Facility Work Is Authorized by Koppers

Koppers Company, Inc., Pittsburgh, Pa., has authorized Girdler Company, Louisville, Ky., to start engineering work on a hydrogen plant for United States Steel Corporation's multi-million dollar expansion program at Clairton, Pa.

The hydrogen will be employed in the production of super-refined benzene, toluene and xylene. The hydrogen at Clairton, site of the world's largest coke plant operation, will be made by a steam-hydrocarbon reforming process and cokeoven gas is to be used as the fuel. Girdler catalysts will be employed throughout the hydrogen facility.

In the past, crude light oil has been refined by washing it with sulfuric acid and caustic. At Clairton a pressure catalytic refining process will be introduced. It will eliminate virtually all of the impurities contained in the three chemicals recovered in the coking operation. U. S. Steel will operate under rights acquired by Koppers from a German concern that first developed this advanced process. U. S. Steel expects its new aromatics plant to be ready late this year.

Pennsalt Manager Named

Arthur F. Bixby has been named manager of marketing research for the industrial division of Pennsylvania Salt Manufacturing Company, Philadelphia. Mr. Bixby will supervise product managers and direct market development on the company's heavy chemicals and "Sharples" brand specialties.

John B. Calkin

Consulting Concern Formed in New York

A new firm of industrial consultants has been formed in New York by George T. Bayley and John B. Calkin. Known as Calkin & Bayley, Inc., the new organization will specialize in marketing and economic research, product and market development, process development and design, business and plant surveys, analysis and testing.

The company, which has offices at 50 East 41st street, is headed by Mr. Calkin as president and Mr. Bayley as executive vice-president. Dr. Robert Frank is vice-president in charge of marketing and economic research, while Dr. John L. Parsons is vice-president in charge of pulp and paper.

Mr. Calkin previously had his own consulting office in New York. Before that he was associated with Foster D. Snell, Inc. He received his education at Haverford College, University of Maine, Massa-

—*Continued on page 63*

Monsanto, St. Regis Plan Styrene-and-Paper Product

Monsanto Chemical Company and St. Regis Paper Company have undertaken the development of production and market possibilities for a unique foamed styrene-and-paper "sandwich" material recently developed.

In its basic form, the product, known as "Foam-Core Board," consists of a core of stiff foamed styrene plastic with a sheet of specification kraft paper on either side. This "sandwich" of paper and plastic foam is produced in a continuous operation. It retains high compression strength under conditions of severe humidity and provides excellent insulation qualities, it is said.

Mobay Expansion Work Proceeding on Schedule

Expansion of production factilities at Mobay Chemical Company's New Martinsville, W. Va., plant is proceeding on schedule with the first additional production unit for the manufacture of isocyanate chemicals scheduled for completion on or about March 1.

The original Mobay plant at New Martinsville, W. Va., was completed late in 1955 and began producing commercial quantities of polyester resins in November of that year and isocynanates in March, 1956.

Barite Production Rise Easily Possible, Brazil Says

Official sources in Brazil last week announced that the latest figures on barite production are for 1954, when output amounted to 12,158 tons, and added that the output can be increased greatly because of the vast amounts of the mineral in the country's subsoil.

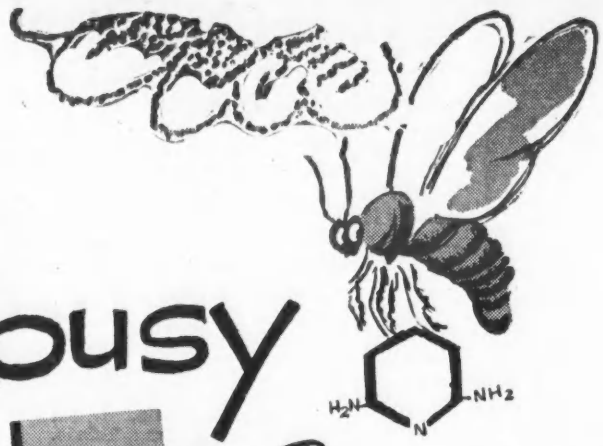
Because of its access to transportation, barite can also be shipped abroad.

Proven reserves of barite in Camamu, near Salvador, Bahia, are in the vicinity of a million tons, much of it at or near the surface. When extracted from the earth the product can be easily floated by barge on navigable streams to the port of embarcation.

The Camamu operations contributed 12,000 tons to Brazil's total last year. The company which has the concession in this area is Pigmina S.A., located at Ilha Grande de Camamu. Its processing mill is on the premises.

In second place is the Santa Luzia installation, in the State of Paraiba. The company located here turned out 120 tons of barite in the year under discussion. Reserves here are also believed to be extensive.

The processing company at Araxa, State of Minas Gerais, has only a local market. Its thirty-eight tons were sold to a nearby paint manufacturer. The Araxa deposits are the oldest known in Brazil. Here the mineral occurs in thin veins along the surface, is ground and distributed to trade.



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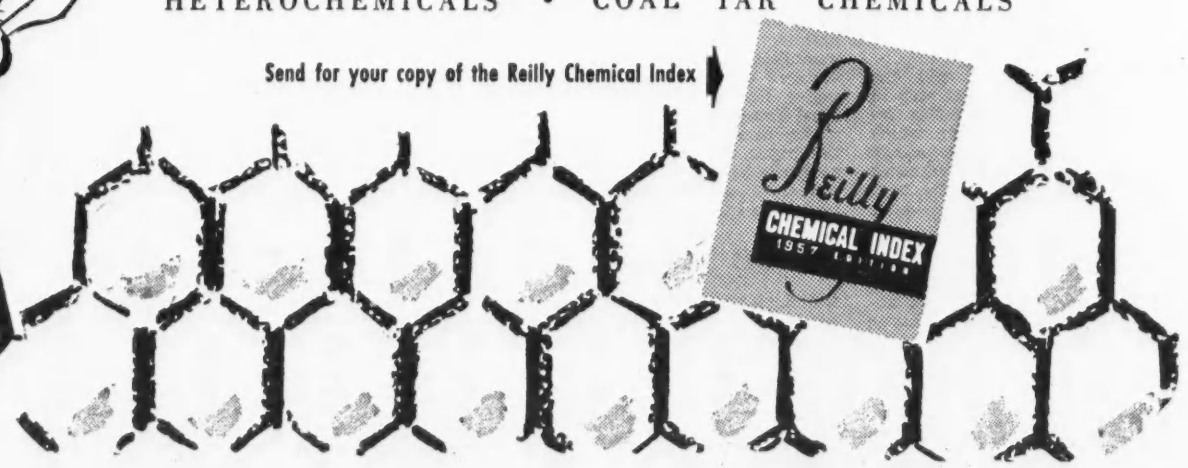


Association Meetings

Antitrust Law Section of the New York State Bar Association, annual meeting, Meeting Hall of the Association of the Bar of the City of New York, January 24.

Chemical Buyers' Group, National Association of Purchasing Agents, mid-winter meeting, western division, Congress hotel, Chicago, January 24.

Food, Drug and Cosmetic Law Section of the New York State Bar Asssociation, annual meeting, Meeting Hall of the Association of the Bar of the City of New York, January 23.

National Pest Control Association, eastern pest control operators conference, University of Massachusetts, Amherst, Mass., January 23-25.

Salesmen's Association of American Chemical Industry, annual induction luncheon, Commodore hotel, New York, January 24.

American Coke and Coal Chemicals Institute, regional meeting, Drake hotel, Chicago, February 7.

American Drug Manufacturers Association, annual meeting, El Mirador hotel, Palm Springs, Calif., April 22-25.

American Pharmaceutical Manufacturers' Association, central section meeting, Edgewater Beach hotel, Chicago, February 11-13; western section meeting, Ambassador hotel, Los Angeles, February 18-19.

Association of Consulting Chemists & Chemical Engineers, banquet and symposium, Belmont Plaza hotel, New York, April 24; annual meeting, Belmont Plaza hotel, New York, October 22.

Chemical Buyers' Group, National Assosociation of Purchasing Agents, eastern meeting, Commodore hotel, New York, January 29.

Chemical Specialties Manufacturers Association, midyear meeting, Drake hotel, Chicago, May 20-22.

Chemical Market Research Association, Sheraton hotel, Philadelphia, March 12-13.

Commercial Chemical Development Association, plastics meeting, Statler hotel, New York, March 27-28; resort meeting, French Lick, Ind., May 13-14.

Drug, Chemical and Allied Trades section of New York Board of Trade, annual dinner, Waldorf-Astoria hotel, New York, March 7; annual meeting, Galen Hall, Wernersville, Pa., September 19-21.

Federation of Paint and Varnish Production Clubs, annual convention, Bellevue-Stratford hotel, Philadelphia, October 30-November 2.

Flavoring Extract Manufacturers' Association, annual convention, Roosevelt hotel, New York, May 19-22.

Manufacturing Chemists Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 6-8.

National Agricultural Chemicals Association, spring meeting, Fairmont hotel, San Francisco, March 6-8

National Paint, Varnish and Lacquer Association, annual convention, Sheraton-Park and Shoreham hotels, Washington, D. C., November 4-6.

National Pest Control Association, Purdue pest control operators conference, Purdue University, West Lafayette, Ind., January 28-February 1; southern pest control operators conference, Louisiana State University, Baton Rouge, La., January 28-30.

National Plant Food Council, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 9-13

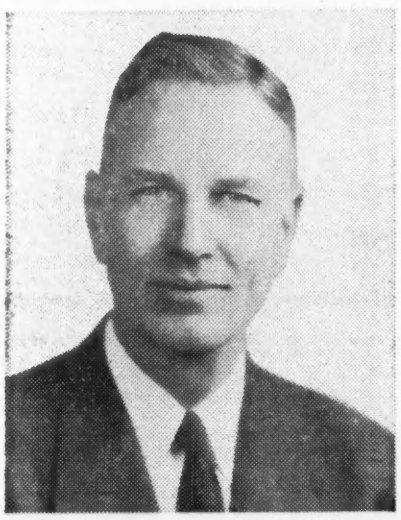
Proprietary Association, annual convention, Greenbrier hotel, White Sulphur Springs, W. Va., May 12-15.

Society of Plastics Industry, annual conference and Pacific Coast plastics exposition, Shrine Exposition Hall, Los Angeles, March 18-21.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, February 14; annual outing, Skyton Lodge, Skytop, Pa., May 26-28.

Technical Training, Economics Are NACA Spring Meeting Topics

The need for more technically trained men and women and the economics of agriculture will be among the highlights at the spring meeting of the National Agricultural Chemicals Association in San Francisco, California, March 6 through 8. The meeting will be held in the Fairmont hotel. The program will bring into focus the growing opportunities in all technical phases of agriculture, including those in the agricultural chemicals industry, and the need for encouraging young men and women to train for openings in industry and in government agencies allied to agriculture.



HEADS VANILLA BEAN ASS'N: William H. Triest of Zink & Triest Company, Philadelphia, who has been elected president of the Vanilla Bean Association.

Farm Economics to Be Discussed

The meeting also will probe into the economics of agriculture, with discussions by top leaders on the importance of financing and credit to agricultural progress, and on the outlook for return on investment in the agricultural chemicals industry.

Where growers and industry stand under the Miller amendment to the food, drug and cosmetic act will be discussed by representatives of government agencies.

Specific topics on the program are:

March 6—President's address on the outlook for the agricultural chemicals industry, Fred W. Hatch, NACA president and manager, agricultural chemical divi-

—Continued on page 47

APMA Unit to Hear Top Executives Speak

A number of top business executives will be among the speakers at the meeting of the American Pharmaceutical Manufacturers' Association's central section meeting, to be held February 11 through 13 at the Edgewater Beach hotel, Chicago.

The theme of the meeting will be "Improving Management's Effectiviness," and will be sounded by Austin S. Igleheart, retired board chairman of General Foods Corporation.

Other sessions will feature Harry Hopkins, vice-president of Tool Steel Gear &

—Continued on page 45

Flavoring Extract Group Will Convene in New York

The forty-eighth annual convention of the Flavoring Extract Manufacturers' Association of the United States will be held at the Roosevelt hotel, New York, May 19 through 22.

Among events planned for the meeting are a hospitality party, a golf tournament at Baltusrol Country Club, a president's reception, and a chemists' breakfast.

Increase of Research Funds Is Viewed as 'Greatest Bargain' By Seaborg, Perkin Medallist

A doubling of the present expenditures for basic research would result in "the greatest bargain the American people have ever had," despite the present shortage of scientists, Dr. Glenn T. Seaborg, internationally noted physicist, declared last fortnight as he accepted the fifty-first impression of the Perkin medal of the American section of the Society of Chemical Industry. Dr. Seaborg, Nobel laureate and professor of chemistry at the University of California, spoke before 500 leaders of American chemistry assembled in his honor in the Waldorf-Astoria hotel, New York.

Admiral Lewis L. Strauss, chairman of the Atomic Energy Commission, introduced the medallist and spoke of his career that has included participation in the discovery of eight hitherto unknown chemical elements in connection with his work on nuclear chemistry.

Dr. Glenn T. Seaborg

Presented by Cohoe

Wallace P. Cohoe, New York chemical consultant and past president of the Society of Chemical Industry, presented the medal. Monroe E. Spaght, executive vice-president of Shell Oil Company and chairman of the American section of SCI, presided.

Dr. Seaborg, who is professor of chemistry in the department of chemistry and chemical engineering and director of chemical research and associate director of the radiation laboratory of the University of California (Berkeley), was honored particularly for important discoveries that have added eight new chemical elements and many new processes to the applied chemistry of nuclear energy. His studies have extended the broad new field of knowledge of the actinide elements.

"The total research and development expenditure, by government, industry, universities and non-profit institutions, is presently about $4 billion a year. Any attempt to estimate the proportion of this devoted to basic research emphasizes our difficulty of definition again. However, even a generously broad definition indicates that no more than 5 to 10 percent of this total annual budget is used for the support of basic research," the speaker declared.

"It is my opinion that this proportion and amount of money expended for basic research is much too small! I believe that we need and should work toward an expansion by something like a factor of two as soon as possible. The efficient use of

—Continued on page 41

Gamma Radiation Facility In Operation at Oak Ridge

A new gamma irradiation unit has been placed in operation by the radioisotope department of the operations division at Oak Ridge National Laboratory, Oak Ridge, Tenn.

The laboratory is operated for the Atomic Energy Commission by Union Carbide Nuclear Company, New York, a division of Union Carbide & Carbon Corporation.

The unit makes space available in the sub-surface cobalt-60 storage installation for irradiation of materials in an intense gamma field. One feature of the new unit is that samples can be irradiated in air rather than under water, as is done with many gamma irradiation devices now in operation.

Cobalt-60 decays with a half-life of 5.3 years. This new facility is designed to utilize the radiation energy from cobalt-60 slugs awaiting shipment to customers. Under normal storage procedure the bene-

—Continued on page 42

Battelle Chairman Renamed

Dr. Zay Jeffries, noted metals scientist and retired vice-president of the General Electric Company, has been re-elected chairman of the board of trustees of Battelle Institute, Columbus, Ohio.

Coke, Coal Group Sets Parley Agenda

The American Coke and Coal Chemicals Institute has put together the program for its regional meeting, to be held in the Drake hotel, Chicago, February 7.

During the morning session there will be an address on "The Gray Iron Foundry Looks to the Future," by Richard C. Meloy, marketing director of the Gray Iron Founders' Society, followed by a paper on "Petrochemicals Versus Octane as Competitors for Raw Material Feed Stocks," by W. F. Wadt, manager of the central sales division of Enjay Company, in Chicago.

The morning program will be concluded with a film, entitled "What's in the Bag," presented by the National Plant Food Institute.

The afternoon session will begin with a paper entitled, "The Conversion of Gilsonite to Premium-Quality Metallurgical Coke," by A. S. Klopf, manager of marketing for American Gilsonite Company in Salt Lake City, Utah. This will be followed by an address on "Aspects and Prospects—Cresols and Cresylic Acids," by James H. Carpenter, of the organics and drug branch of the chemical and rubber division of the Business and Defense Services Administration.

The meeting will close with a dinner at which Dr. Carl S. Winters will speak on 'People Are Fun."

USDA Reopening Bartering Of Lead, Zinc for Surplus

Department of Agriculture said last week it would again consider offers to exchange lead and zinc for surplus Commodity Credit Corporation-owned farm products.

Barter transactions involving lead and zinc were temporarily discontinued late in December pending clarification of policies on deliveries.

In announcing resumption of lead and zinc barter transactions, the department emphasized that any of these materials contracted for must be delivered as soon as possible.

Inspection Is First Line of Defense, Says USDA

The first line of defense against imported plant pests and diseases is inspection and quarantine at the nation's ports of entry, the Department of Agriculture said last week as it announced that during the past fiscal year inspectors intercepted some 17,500 shipments containing plant pests and 244,000 lots of contraband plant materials.

The government inspected more than 97,000 airplanes and 46,000 ocean vessels, in addition to more than 100,000 freight cars and 17 million vehicles crossing United States borders, it was said.

There is heartening evidence that infestations of some dangerous plant pests can be eradicated, rather than only temporarily controlled. At the beginning of 1957, workers were well along with the eradication of such costly pests as the Mediterranean fruit fly, Khapra beetle and Hall scale. A good start has been made in the direction of ultimate eradication of the gypsy moth, according to USDA.

Invasion of the United States by the Mediterranean fruit fly—for the first time since 1929—was the most pressing problem facing plant pest control officials during 1956. In the Medfly eradication program—begun shortly after the insect was discovered in Florida in April—more than

—Continued on page 60

Why you should use

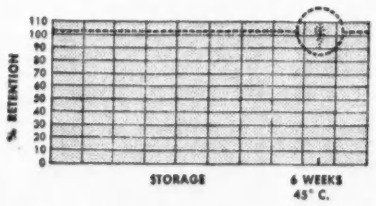
'ROCHE' { RIBOFLAVIN (vitamin B_2) / RIBOFLAVIN-5'-PHOSPHATE SODIUM

'ROCHE' VITAMIN B_2

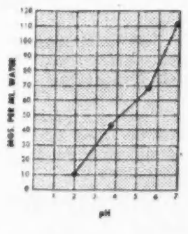
With the varied requirements for vitamin products in mind, Roche has developed three types of riboflavin to meet your formulating needs. As with all Roche vitamins, there are good reasons why you should specify riboflavin *'Roche'*. These again prove the wisdom of our statement: "It pays to stay with the leader."

A. THREE TYPES. Roche makes three types of riboflavin, each of which has special advantages for pharmaceutical manufacturers.

- **RIBOFLAVIN 'ROCHE'—REGULAR.** Especially useful for powdered dietary supplements, pharmaceutical tablets, soft gelatin capsules and dry enrichment premixes.
- **RIBOFLAVIN 'ROCHE'—SOLUTIONS TYPE.** For use in parenteral solutions which approach or slightly exceed the maximum solubility of B_2. Less likely to crystallize out.
- **RIBOFLAVIN-5'-PHOSPHATE SODIUM 'ROCHE'.** An original Roche development. Preferred for all solutions because it is rapidly and highly soluble. Better taste . . . no bitter after taste. Eliminates need for solubilizers. Specially valuable for highly concentrated oral and parenteral multivitamin solutions (with or without ascorbic acid), elixirs, syrups, water dispersible multivitamin formulations in capsules, tablets, lozenges. Theoretical B_2 content: 73%. Roche product: 70-73%.



STABILITY in B-complex parenteral solutions with or without vitamin C.



SOLUBILITY in water at different pH levels; room temperature.

B. QUALITY. All riboflavin 'Roche' (Regular and Solutions Type) meets U.S.P. requirements. Riboflavin-5'-Phosphate Sodium 'Roche', for which no U.S.P. standards exist, meets the exacting production controls established by Roche for all of its vitamins. Roche uses its own synthesis in the manufacture of riboflavin.

C. UNIFORMITY IN COLOR. Uniform color of each type is maintained in Roche manufacturing.

D. STEADY SUPPLY. Roche makes vitamins, including riboflavin, by the tons. You are sure of steady supplies.

E. QUICK DELIVERY. Every order receives prompt, careful service from convenient points. Transportation at lowest rate allowed and prepaid to destination. Special routings at cost.

F. PACKAGING. Packed in polyethylene bags in ½ and 1 kilo tamper-pruf metal containers and in fibre drums up to 20 kilos. Small quantities in amber s.c. glass bottles.

G. LEADERSHIP. Because of its position as a world-leader in research and production of vitamins you can rely on Roche.

H. NEED SAMPLES? Ask your Roche salesman or write the Vitamin Division for samples and technical literature.

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CHEMICALS AND RELATED MATERIALS

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, January 18 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Acacia (see Gum arabic).
Acenaphthene, below 92.5 C., m.p., dms., works lb. .40 - —
above 92.5 C., m.p., bbls., dms., lb. .41 - .50
Acetaldehyde, 99%, dms., c.l., works, lb. .12 - —
l.c.l., works lb. .13½ - —
tanks, works lb. .10 - —
Acetaldol (see Aldol).
Acetanilide, tech., flaked, bbls., bgs., c.l., frt. alld lb. .30½ - —
ton lots lb. .31½ - —
smaller lots lb. .34½ - —
USP, bbls., 2,000-lb. lots lb. .79 - —
smaller lots lb. .80 - .81
Acetic anhydride, aluminum ret., dms., c.l., dlvd. E lb. .15½ - —
l.c.l., dlvd. E lb. .17 - —
tanks, dlvd. E lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
l.c.l., dlvd lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd 1.35 - —
l.c.l., dlvd lb. 1.36 - —
Acetoacet-o-toluidide, fib. dms., c.l., dlvd. lb. .82 - —
l.c.l., dlvd lb. .83 - —
Acetone, CP, dms., c.l., dlvd. lb. .10½ - —
l.c.l., dlvd lb. .11½ - —
tanks, dlvd lb. .08 - —
Methyl (see MI).
Acetonitrile, dms., c.l., works lb. .45 - —
l.c.l., works lb. .47 - —
Acetophenetidin, USP, bbls., works, frt. equald lb. 1.17 - 1.19
Acetophenone, cns., dms lb. 1.21 - 1.85
tech., dms., l.c.l., works lb. .75 - —
N-Acetyl-p-aminophenol, dms., frt. adjusted lb. 1.75 - 1.83
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E of Denver lb. .36 - —
l.c.l., frt. alld. E. of Denver lb. .38 - —
tanks frt. alld. E of Denver, lb. .33 - —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39 - —
l.c.l. frt alld E of Denver. lb. .40 - —
tanks, frt. alld. E of Denver. lb. .37 - —
Acetyltri-2-ethylhexyl citrate, non-ret. dms., frt. alld lb. .60 - —
Acid, abietic, comi., dms., c.l., works lb. .12 - —
l.c.l., ex whse lb. .1490 - —
cryst., dms. c.l., works lb. .06½ - —
l.c.l., works lb. .07 - .07½
Acetic comi. or redist., 28%, bbls 100 lbs. 4.80 - —
56% bbls 100 lbs 8.25 - —
70% bbls 100 lbs 9.95 - —
80% bbls 100 lbs 10.45 - —
glacial syn. CP. dms., dlvd. .00 lbs. 22.00 - 23.00
tech. dms. c.l. dlvd 100 lbs. 13.75 - —
l.c.l. dlvd. 100 lbs. 14.25 - —
tanks, dlvd 100 lbs. 10.00 - —
USP chys. inclusive dlvd., 100 lbs. 31.00 - 32.00
Acetic anhydride (see Acetic anhydride above).
Acetylsalicylic, USP, special makers, primary distrib., bbls. 1,000-lb lots, point of shipt lb .61 - —
standard, fine, cryst., gran., (30-40 mesh) powd. (60 mesh) bbls 1,000-lb lots, same basis lb. .56 - .58
Freight equald, shipt identical quantity over standard routes, from N. Y., Phila., Midland, Mich., Chicago and St. Louis
Adipic, bgs., c.l. dlvd lb .32 - —
l.c.l., dlvd lb .34¾ - —
Aminoacetic, NF bbls., frt adjusted lb 1.50 - 1.75
p-Aminobenzoic, tech., dry, dms., works lb 1.74 - 1.77
USP dms. 1,000-lb lots or more, works lb. 2.60 - —
smaller lots, works lb. 2.65 - 2.75
p-Aminosalicylic, dms. 100 lbs or more, frt adjusted lb 3.70 - —
Anthranilic, 99%, 150-lb. dms., dlvd lb. 1.15 - —
Arsenous, tech (see Arsenic, white)
USP (see Arsenic trioxide)
Ascorbic, USP, dms. 25-100 kilo lots kilo. 12.00 - —
10-kilo lots kilo 12.35 - —
5 kilo lots kilo 12.75 - —
lots 1-kilo lots kilo 13.00 - —
500-gram lots kilo 13.50 - —
Battery, cbys., c.l., works, E. 100 lbs 2.35 - —
l.c.l. works E 100 lbs 2.65 - 3.45
Benzoic, tech., bbls., dms., 100-lb lots or more lb. .44 - —
USP, bbls. dms. 100-lb. lots or more lb. .54 - —
Betahydroxynaphthoic (see Acid, b-Oxynaphthoic).
Betaoxynaphthoic (see Acid b-Oxynaphthoic).
Boric, tech., 99.9%, cryst., bgs., c.l., works ton.129.00 - —
ton lots, ex whse., N. Y. or Chi. ton.184.25 - —
smaller lots, same basis. ton.189.25 - —
dms., c.l., works ton.153.50 -173.50
ton lots, ex whse., N. Y. or Chi. ton.208.75 -228.75
smaller lots, same basis. ton.213.75 -233.75
gran., bgs., c.l., works ton.104.00 - —
ton lots, ex whse., N. Y. or Chi. ton.139.25 - —
smaller lots, same basis. ton.164.25 - —
dms., c.l., works ton.128.50 -148.50
ton lots, ex whse., N. Y. or Chi. ton.183.75 -203.75
smaller lots, same basis. ton.188.75 -208.75
bulk, c.l., works ton.98.00 - —

Acacia—Acid, Itaconic

Acid boric, tech., 99.9% powd., bgs., c.l., works ton.109.00 - —
ton lots, ex whse., N. Y. or Chi ton.159.25 - —
smaller lots, same basis. ton.164.25 —
dms., c.l., works ton.133.50 -153.50
ton lots, ex whse., N. Y. or Chi ton.188.75 -208.75
smaller lots, same basis. ton.193.75 -213.75
USP boric acid $25 per ton higher.
Broenners bbls lb 1 76 —
Butyric, 99%, dms., c.l., frt. equald. lb. .34 - —
l.c.l., same basis lb. .34½ - —
tanks, same basis lb. .32½ - —
Capric, dms lb 25 .27
Caprylic, dms lb 23 .27
Cassella dms. frt alld., 100% basis lb 1.44 1.75
Castor oil, dms lb .17¾ - .19¾
Chicago paste bbls. frt. alld lb 3.21 —
Chloroacetic, mono purif., flake, 99% dms lb 23½ 25½
tech. flake 96-97%, dms., frt. equald lb .20 21
o-Chlorobenzoic, fib dms., t.l., works lb 1.10 - —
smaller lots, works lb 1.25 - —
Acid, p-chlorobenzoic, fib dms., 2,000 lbs or more, works lb 2.25 - —
less than 2,000 lbs., same basis. lb 2.30 - —
Chlorosulfonic, dms., c.l., frt. equald lb. .0465 - —
l.c.l., frt. equald lb .0515 - —
tanks, frt equald lb. .0415 - —
Acid, chlorosulfonic, in stainless steel dms., ½c. per lb higher.
Chromic, 99¾%, dms., c.l., works, frt. equald lb. .29½ - —
l.c.l., dlvd. N. Y., Metropolitan area lb. .30 - .31
NF (see Chromium trioxide).
Cinnamic, refd., bots lb 2.50 3.50
Citric, USP anhyd., gran., fine gran., bgs., dms., c.l. lb. .29½ .30
10,000-lb lots, 1 shipt. lb. .30 - .30½
smaller lots lb. .30½ - .31
hydrous, gran., fine gran., bgs., dms., c.l lb. .27½ .28
10,000-lb lots, 1 shipt. lb. .28 .28½
smaller lots lb. .29 .29½
Powdered citric acid ½c. higher.
Cleve's, mixed, bbls lb. 1.05 - —
Coconut oil, dist., dms lb 25 .27
tanks lb 23 .25
dbl dist., dms lb 25 .27
tanks lb 23 .24
Corn oil, dist. dms lb. 16¾ - .18¾
tanks lb. 14¾ - —
Cottonseed oil, dist., dms lb. .15¾ - .17¾
tanks lb. .13¾ - —
2,3-Cresotic, dms., ton lots, works. lb. 70 - —
smaller lots, works lb. .72 - —
Cresylic, coaltar, dom., resin and tricresyl phosphate grade, 50%, 207° or above, tanks, frt. equald. gal. 1.10 - —
204° to 207° C., tanks, frt. equald. gal. 1.10 - —
non-resin grade, 50%, 210° or above, total range over 9° C., dms., c.l., frt. equald. gal. 1.15 - —
l.c.l., frt equald gal. 1.19 1.20
tanks, frt. equal l gal. 1.00 —
Imp. 75% at 215° C. or over, dms., ex whse gal. .93 - —
petroleum, dom., 195° to 214°C., non-ret. dms., 65 to c.l., works, San Francisco and Los Angeles gal. .80 - —
l.c.l. same basis gal. .82 .84
tanks, same basis gal. .65 —
200° C to 222° C., tanks, Wilmington, Cal lb. .65 .72
211° C to 237° C., non-ret. dms., c.l., San Francisco and Los Angeles gal. .76 —
l.c.l. same basis gal. .78 .80
tanks, same basis gal. .61 —
220° C to 242° C., tanks, Wilmington, Cal lb. .62 .67
245° C to 295° C., tanks, Wilmington, Cal gal. .50 —
Crotonic, fib dms., 200 lbs. or more, works lb. .50 —
Cyanoacetic, tech., bbls. lb. .90 1.25
Dichlorophenoxyacetic (see 2,4-D)
Diethylbarbituric (see Barbital)
Diglycolic, bgs. works lb. 14 —
Dithiodibenzoic, dms. 1,000-lb lots works lb. 1.45 - —
2-Ethyl hexoic, dms., c.l. dlvd. lb. .37 - —
l.c.l. dlvd lb. .38 - —
tanks, dlvd lb .34½ - —
F, crude, paste, bbls., works lb. 2.10 - —
Folic, bots., fib. cns., kilo-lots or more gram. 1.40 - —
Formic, 85%, cbys., c.l., works lb. .1370 - —
l.c.l., works lb. .1620 - .1720
90%, cbys., c.l., works lb. .1625 - —
l.c.l., works lb. .1675 - .1775
Fumaric, tech., bgs., dms., c.l., frt. alld. E lb. .27 - —
l.c.l., same basis lb. .28 - —
Prices of fumaric acid 1½c. per lb. higher west of Denver.
Gallic, NF VII, bbls 1,000-lb lots lb. 2.00 - —
smaller lots lb. 2.02 - 2.22
tech., bbls., 1,000-lb. lots lb. 1.78 - —
smaller lots lb. 1.80 - 2.00
Gamma dry, grd. bbls. frt. alld lb 1.50 —
paste, obls frt alld 1 45 —
Gluconic, tech., 50%, bots., wor' lb. .25 - 1.16
non-ret. dms., c.l., works. .15½ - —
1-dm. lots, works lb .16 - —
l-Glutamic, 99½% fib dms. 100-lb. lots, frt. alld lb. 2.00 - —
25-lb. lots, frt. alld lb. 2.05 - —
Glycolic (see Acid hydroxyacetic).
H, dry, bbls., c.l., frt. alld., 100% basis lb 1 00 - —
l.c.l. same basis lb 1 02 - —
Hydriodic, 1.50 s.g., cbys lb 2.94 - —
1.70 s.g., cbys lb 3 23 - —
Hydrobromic, medicinal, 48%, cbys., dlvd. E lb. .37 .43
Hydrochloric, anhyd (see Hydrogen chloride).
18° cbys. c.l., works 100 lbs. 2.50 —
l.c.l. dlvd., Metropolitan area 100 lbs. 2.90 3.05
tanks works, frt. equald ton.28.00 - —
20° cbys. c.l., works 100 lbs. 2.75 - —
l.c.l., dlvd Metropolitan area 100 lbs. 3.15 - —
tanks, works, frt. equald ton.30.00 - —
22° cbys. c.l., works 100 lbs. 3.25 - —
l.c.l. dlvd., Metropolitan area 100 lbs. 3.65 - —
tanks, works, frt. equald ton.35.00 - —
CP, USP consumers, cbys., extra, c.l., works lb. .15¾ - —
l.c.l., same basis lb. .17¼ - .17¾
5-pint bots, extra, cs., c.l., same basis lb .20¾ - —
l.c.l. same basis lb. .22¼ - .23¼
Acid, hydrochloric, CP, USP, prices to dealers 1½c per lb less.
Hydrocyanic, cyls, c.l. dlvd lb. .70 —
l.c.l., same basis lb. .75 - .90
dilute, NF, 2%, 5-lb. bots lb. .40 - —
Hydrofluoric, anhyd. (see Hydrogen fluoride).
aqueous, 70%, 55-gal. dms., c.l., t.l., dlvd 100 lbs. 19.25 - —
l.c.l., l.t.l., dlvd 100 lbs. 20.75 - —
20-gal. dms., c.l., t.l., dlvd. 100 lbs. 21.00 - —
l.c.l., l.t.l., dlvd 100 lbs. 22.50 - —
tanks, works, frt. equald. 100 lbs. 15.50 - —
Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington, and Wyoming. In those states add $2.70 per cwt. for drum delivery.
Hydrofluosilicic, dms. works, 30% basis lb. .06 —
Hydroxyacetic, tech., 70%, non-ret. bbls., Phila., 100% basis lb. .136 - —
tanks Belle, W. Va., 100% basis lb. .095 —
Hypophosphorus, purif., 50%, cbys lb. 1.30 - 1.32
USP, cbys. lb. .88 —
Isonicotinic, 100-lb fib dms., works lb. 4.25 —
Hydrazide (see Isoniazid).
Itaconic, tech., fib. dms., c.l., works lb. .44 - —
l.c.l., works lb. .45 - —
purif., fib. dms., c.l., works lb. .54 - —
l.c.l., works lb. .55 - —

Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	NNR	New and Nonofficial Remedies
amorph.	amorphous	djns.	demijohns	No.	number
AMP	American melting point	dlvd.	delivered	nom.	nominal
anhyd.	anhydrous	dms.	drums	o-	ortho
a.p.a.	available phosphoric acid	dom.	domestic	ord.	ordinary
approx.	approximately	E.	east	oz.	ounce
artif.	artificial	e.p.	end point	p-	para
ASTM	American Society for Testing Materials	equald.	equalized	Pac.	Pacific
Atl.	Atlantic	exp.	expressed	pf	proof
Be.	Baume	F	fahrenheit	phos.	phosphate
bbls.	barrels	ferment.	fermentation	photo.	photographic
bgs.	bags	f.f.a.	free fatty acid	pkgs.	packages
bls.	bales	f.f.c.	free from chlorine	powd.	powdered
bots.	bottles	fib.	fiber	precip.	precipitated
b.p.	boiling point	f.o.b.	free on board	prod.	producer
b.p.l.	bone phosphate of lime	f.p.a.	free of prussic acid	pt.	point
b.r.	boiling range	frt.	freight	pulv.	pulverized
bxs.	boxes	gal.	gallon	purif.	purified
C.	centigrade	gran.	granular	redist.	redistilled
cbys.	carboys	grd.	ground	refd.	refined
CD	completely denatured	i.&a.	iron and aluminum	refy.	refinery
c.i.f.	cost, insurance, freight	i.b.p.	initial boiling point	reg.	regular
cks.	casks	imp.	imported	resub.	resublimed
c.l.	carlots	incl.	included	ret.	returnable
cns.	cans	indust.	industrial	SD	specially denatured
coml.	commercial	kgs.	kegs	s.d.	single distilled
conc.	concentrated	l-	laevo	S. E.	southeast
CP	chemically pure	lacq.	lacquer	sec.	secondary
cps.	centipoises	lb	pound	secs.	seconds
cryst.	crystal	l.c.l.	less than carlots	s.g.	specific gravity
cs.	cases	l.t.l.	less truckload	ship't	shipment
ctns.	cartons	liq.	liquid	soln.	solution
cyls.	cylinders	mfrs.	manufacturers	s.u.	standard unit
d-	dextro	m-	meta	syn.	synthetic
dbl.	double	m.a.p.	mixed aniline point	tanks.	railroad tankcars
denat.	denatured	min.	minimum	tech.	technical
dest-dist.	destructive-distilled	m.p.	melting point	tert-	tertiary
dl-	dextro-laevo	N-	nitrogen	t.l.	truck loads
dist.	distilled	n-	normal	t.w.	tank wagons
distr.	distributor	nat.	natural	USP	U. S. Pharmacopoeia
djns.	demijohns	neut.	neutral	vis.	viscosity
dlvd.	delivered	NF	National Formulary	VM&P	varnish makers & painters
dms.	drums			W.	west
dom.	domestic			whse.	warehouse
E.	east			w w	water-white
e.p.	end point				
equald.	equalized				
exp.	expressed				

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

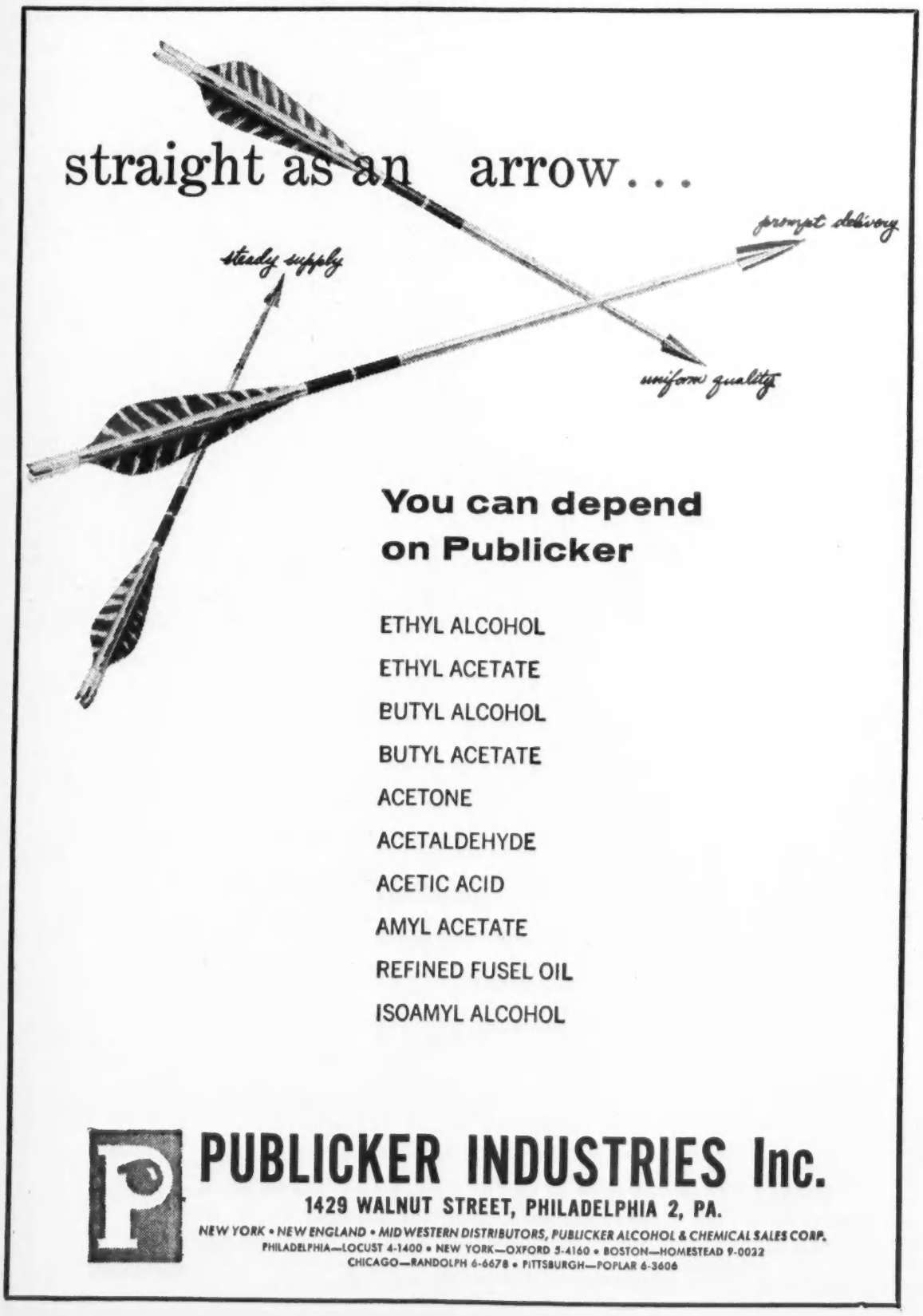
Acid J—Alcohol, n-Butyl

Acid, J, paste, bbls., works, 100% USP 85% chys ... lb. .85 - .88
basis lb 2.45 - —
powd., bbls., same basis ... lb 2.50 - 2.85
Koch, bbls, frt alld, 100% basis. lb. 1.00 - —
L, bbls, works ... lb. 1.25 - —
Lactic, edible, 50%, bbls., 20 or more lb. .1821- .215
smaller lots ... lb. .1921- .225
80%, bbls., 5 or more ... lb. .3121- .37
smaller lots ... lb. .3171- .375
plastic grade 50%, bbls., 20 or more works lb .23 - —
1 to 19 ... lb. .235 - —
80%, bbls., 5 or more ... lb. .385 - —
tech., 22% bbls, c.l., works 100 lbs 6.30 - —
t.c.l., works 100 lbs 6.70 - —
cbys., t.c.l., works 100 lbs. 12.20 - —
44%, bbls., c.l., works 100 lbs. 11.45 - 11.95
t.c.l., works ... 100 lbs. 11.85 - 12.35
Laurent's, bbls ... lb. .69 - —
Lauric, 90% dms ... lb. .36½- .38½
Linseed oil, dist., dms ... lb. .1970- —
w.w., dms ... lb. .2270- —
Maleic, cryst., powd., dms ... lb. .37 - .38
Malic, tech., dms ... lb. .50 - —
Mandelic, NF dms, 1,000-lb. lots. lb 2.35 - —
smaller lots ... lb. 2.40 - 2.50
Metanilic, dms., works ... lb. .57 - .75
Methacrylic, glacial, 98%, dms., truckloads, works lb. .47 - —
smaller lots, works ... lb. .47½- .50
tanks, works ... lb. .45 - —

Molybdic, 85%, dms., works lb. 1.20 - —
Monochloroacetic, purif. (see Acid, Chloroacetic mono-).
Muriatic (see Acid, hydrochloric).
Myristic, dms ... lb .26 - .28
1-naphthol-4 sulfonic (see Acid, Neville and Winthers)
1-Naphthol-5-sulfonic (see Acid, L).
1-Naphthol-5-sulfonic 8-amino (see Acid, S).
1-Naphthol-3,6-disulfonic 8-amino (see Acid, H).
2-Naphthol-6,8-disulfonic (see Acid, Gamma).
5-Naphthol-7-sulfonic 2-amino (see Acid, J).
Naphthol sulfonic mixed (see Acid, Cleve's).
1-Naphthylamine-5-sulfonic (see Acid, Laurent's).
2,Naphthylamine-4,8-disulfonic (see Acid, Cassella).
2-Naphthylamine-6-sulfonic (see Acid, Broenner's).
2-Naphthylamine-7-sulfonic (see Acid, F).
2-Naphthylamine-1-sulfonic (see Acid Tobias).
Nevile and Winther's, dms., frt. alld lb. 1.30 - —
Nicotinic, USP, dms., dlvd kilo. 8.00 - 8.30
Amide, USP (see Nicotinamide).
Nitric, 36° Be, cbys, c.l., works, E 100 lbs. 5.75 - —
t.c.l., works, E ... 100 lbs. 6.05 - 6.85
38° Be, cbys., c.l., works, E. 100 lbs. 6.25 - —
t.c.l., works, E ... 100 lbs. 6.55 - 7.35
40° Be, cbys., c.l., works, E. 100 lbs. 6.75 - —
t.c.l., works, E ... 100 lbs. 7.05 - 7.85

Acid, nitric, 42° Be., cbys., c.l., works E ... 100 lbs. 7.25 - —
t.c.l., works, E ... 100 lbs. 7.55 - 8.35
[illegible] tanks, works, basis 100 lbs. 3.90 - —
[illegible] basis 100 lbs. 4.90 - —
CP, [illegible] lbs., extra, lb. .18½- —
[illegible] basis lb. .20 - .20½
[illegible] extra cs., c.l., basis lb. .22½- —
t.c.l., same basis lb. .24 - .25
p-Nitrobenzoic, dms., c.l., works, lb. .72 - —
t.c.l., works ... lb. .73 - —
Oleic, s.d., dms ... lb. .18½- .20½
tanks ... lb. .16½- —
dbl. dist. (white) dms. lb. .20½- .22½
tanks ... lb. .18½- —
Oleum (see Acid, sulfuric, fuming).
Orthochlorobenzoic (see Acid, o-Chlorobenzoic).
Orthocresotinic (see Acid, 2,3-Creosotic).
Oxalic, bbls, c.l., works ... lb. .16½- —
10,000-lb. lots, works ... lb. .16¾- —
smaller lots, works ... lb. .17¾- —
b-Oxynaphthoic, fib. dms, 250 lbs. or more, frt. alld lb. 1.14 - 1.17
Palm, dist., dms ... lb. .14¾- .16¾
tanks ... lb. .12¾- —
Para aminobenzoic (see Acid, p-Aminobenzoic).
Para aminosalicylic (see Acid, p-Aminosalicylic).
Parachlorobenzoic (see Acid p-Chlorobenzoic).
Paramethylphenylcinchonic (see Neocinchophen).
Paranitrobenzoic (see Acid p-Nitrobenzoic)
Paratoluidinmetasulfonic (see Acid p-toluidine-m-sulfonic).
Peri, dry, frt. alld, ... lb. 1.35 - —
paste, frt. alld, ... lb. 1.30 - —
Phenylacetic, pure, cryst., cns. lb. 1.45 - 1.75
Phenylcinchoninic (see Cinchophen).

Acid, phenylglycolic (see mandelic).
Phosphoric, food grade, 75%, cbys., c.l., works, E., frt. equald 100 lbs. 6.75 - —
t.c.l., same basis 100 lbs. 7.00 - 7.50
tanks, works ... 100 lbs. 5.35 - —
80%, cbys., c.l., frt. alld. 100 lbs. 7.60 - —
t.c.l., works ... 100 lbs. 7.85 - 9.10
tanks, works ... 100 lbs. 5.75 - —
NF, 85%, cbys., c.l., works lb. .0825- —
c.l., works ... lb. .0850- .0875
tanks works ... lb .0640- —
Picric, NF, bbls ... lb. .85 - —
tech., bbls ... lb. .44 - —
Propionic, syn., pure, dms., c.l., works ... lb. .22¾- —
t.c.l., works ... lb. .23¾- —
tanks, works ... lb. .20¾- —
Pyrogallic, NF (see Pyrogallol)
tech., bbls ... lb. 3.17 - 3.25
Ricinoleic (see Acid, castor oil, split)
S., bbls, works lb 3.25 - —
Salicylic, crude 6b dms, c.l., frt alld lb. .35 - —
t.c.l., frt. alld. on 100 lbs. or more lb. .36 - —
sublimed, tech. fib. dms., c.l., dlvd lb. .37 - —
t.c.l., dlvd. ... lb. .41 - —
USP, cryst., fib. dms lb. .48 - —
powd., fib dms lb. .55 - —
Sebacic, purif., dms, c.l. works. lb. .64 - —
t.c.l., works ... lb. .66 - .70
Soybean oil, dbl dist., dms lb. .18¾- .20¾
tanks ... lb. .16¼- —
s.d., dms ... lb. .17¼- .19¼
tanks ... lb. .15¼- —
Stearic, dbl. pressed, bgs ... lb. .15¼- .17¼
single pressed, bgs ... lb. .14¾- .16¾
triple pressed, bgs ... lb. .17½- .19½
Succinic, purif., cryst., bbls., works lb. .62 - .75
Sulfanilic, tech., dms. c.l., frt. alld lb. .21 - —
t.c.l., frt. alld ... lb. .23 - —
Sulfuric, 60° Be, cbys., c.l., works 100 lbs 2.00 - —
t.c.l., works 100 lbs 2.45 - —
tanks, works ton. 18.60 - —
66° Be, cbys., c.l., works. 100lbs. 2.25 - —
t.c.l. works ... 100 lbs. 2.55 - 3.35
tanks, works ... ton. 22.35 - —
98%, tanks, works ... ton. 23.50 - —
99-100%, tanks, works ... ton. 23.95 - —
CP, NF, consumers frt. equald. lb. .12¾- —
t.c.l., same basis lb. .14¼- .14¾
5-pt. bots., extra cs., c.l., works, frt. alld lb. .16¼- —
t.c.l., same basis lb. .18¼- .18¾
fuming (oleum), 20%, tanks, works. ton. 25.00 - —
40%, tanks, works ... ton. 29.00 - —
65%, tanks, works ... ton. 39.50 - —
Tall oil, dms., c.l., works ... lb. .09 - .09½
tanks, works ... lb. .07½- .08
Tallow dist., dms ... lb. .15¼- .17¼
tanks ... lb. .13¼- —
hydrogenated, dms ... lb. .14¼- .16¼
Tannic, NF fluffy bbls., 1,000-lb. lots lb. 2.05 - —
smaller lots lb. 2.06 - 2.10
powd., bbls., 1,000-lb. lots. lb. 1.95 - —
smaller lots ... lb. 1.96 - 2.01
tech., dms ... lb. 1.05 - —
Tartaric, USP, dom., 230 or 250-lb. dms., c.l lb. .49 - —
10,000-lb. lots, 1 shipt. lb. .49½- —
smaller lots ... lb. .50 - —
100-lb. dms ... lb. .51 - —
imported, bgs ... lb. .42 - .45
Thioglycolic, refd., cbys., 100% basis lb. 1.35 - 1.58
Thiosalicylic, purif., dms., 1,000-lb. lots, works lb. 4.00 - —
Tobias, bbls., frt. alld lb. .81 - —
p-Toluenesulfonic, dms., c.l., t.l., works lb. .17 - —
t.c.l., works ... lb. .18 - —
p-Toluene sulfonic, monohydrate, dms., c.l., or t.l lb. .90 - —
125 lbs. to t.l ... lb. 1.00 - —
o-Toluidine-m-Sulfonic, frt. alld. lb. .70 - —
p-Toluidine-m-sulfonic, bbls., works lb. .92 - 1.04
Trichloroacetic, bots. ... lb. 2.00 - 2.50
Trichlorophenoxyacetic (see 2,4,5-T).
Tungstic, tech., dms., 1,000-lb. lots, works lb. 3.00 - —
smaller lots, works ... lb. 3.15 - 3.50
Undecylenic, dms ... lb. 1.40 - —
Aconite root, bls ... lb. .50 - .55
Acrolein, tech., dms., c.l., works. lb. .47 - —
t.c.l., works ... lb. .47½- —
tanks, works ... lb. .46 - —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. .31 - —
t.c.l., t.t.l., frt. equald ... lb. .32 - —
tanks, frt. equald ... lb. .28 - —
ACTH, cryst., bulk, 1,000 units/gram, lots gram. 15.00 - —
Adeps lanae (see Lanolin)
Adrenocorticotropic hormone (see ACTH).
Agar, USP Kobe No. 1, strip, bls. lb. 2.25 - —
powdered, 30 mesh., fib., dms lb. 2.75 - —
dl-Alanine dms, works ... lb 8.50 - 11.00
Albumin, blood, dark (see Blood dried, soluble).
light, dms ... lb. .65 - 1.00
Egg, edible, cryst., powd., bbls. lb. 1.63 - 1.65
flake ... lb. 1.59 - 1.61
tech., cryst., bbls ... lb. 1.08 - 1.10
Alcohol, allyl, dms., c.l. dlvd ... lb. .32 - —
t.c.l., dlvd ... lb. .33 - —
tanks, dlvd ... lb. .30 - —
Amyl, ex fusel oil (see Fusel oil, refd.)
ferment., refd., 128°-132°C., dms., t.c.l., dlvd lb. .43 - —
ACS grade, dms., t.c.l., dlvd lb. .45 - —
ex-pentane, mixed, amyls, dms., c.l., frt. alld lb. .18½- —
t.c.l., frt. alld ... lb. .19½- —
tanks, frt. alld ... lb. .16 - —
primary, dms., c.l., frt. alld. lb. .19¾- —
t.c.l., frt. alld ... lb. .20¾- —
tanks, frt. alld ... lb. .17¾- —
sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
t.c.l., works ... lb. .20 - —
tanks, works ... lb. .17 - —
tert-synthetic, dms., c.l., frt. alld. E. lb. .18½- —
t.c.l., frt. alld E ... lb. .19½- —
tanks, frt. alld E ... lb. .16 - —
1-pentanol, (syn normal), dms., c.l., works lb. .41½- —
t.c.l., works ... lb. .42½- —
tanks, works ... lb. .39½- —
2-pentanol, dms., c.l., works lb. .65 - —
t.c.l., works ... lb. .70 - —
tanks, works ... lb. .60 - —
Benzyl, NF, dms ... lb. .64 - .79
tech., dms., dlvd ... lb. .47½- .49
n-Butyl, ferment., dms., c.l., frt. alld lb. .16½- —
t.c.l., frt. alld ... lb. .17½- —
tanks, frt. alld ... lb. .14 - —
syn., dms., c.l., dlvd ... lb. .16½- —
t.c.l., dlvd ... lb. .17½- —
tanks, dlvd ... lb. .14 - —
sec-synthetic, dms., c.l., dlvd. lb. .14½- —
t.c.l., dlvd ... lb. .15½- —
tanks, dlvd ... lb. .12 - —



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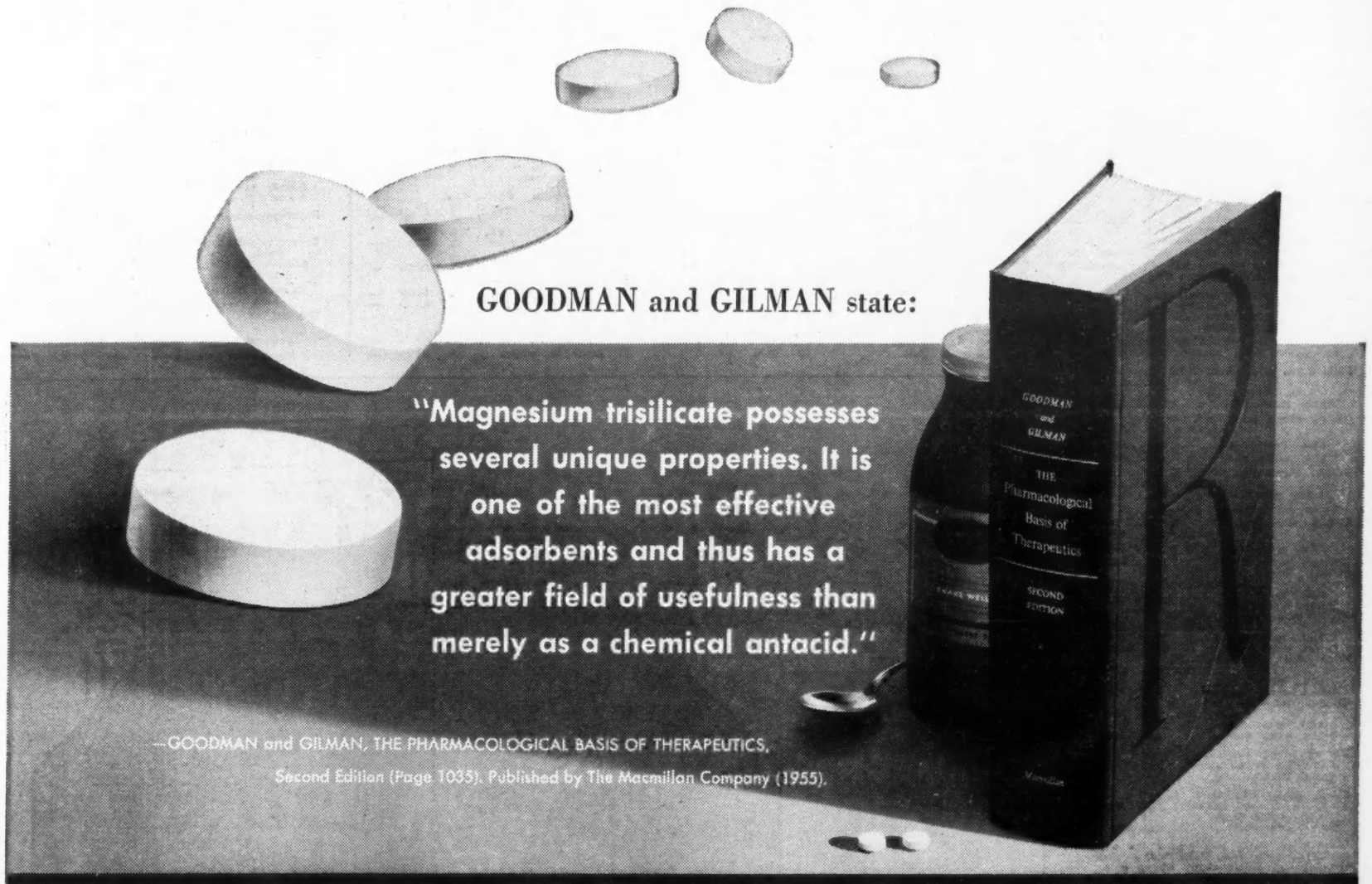

GOODMAN and GILMAN state:
"Magnesium trisilicate possesses several unique properties. It is one of the most effective adsorbents and thus has a greater field of usefulness than merely as a chemical antacid."
—GOODMAN and GILMAN, THE PHARMACOLOGICAL BASIS OF THERAPEUTICS, Second Edition (Page 1035). Published by The Macmillan Company (1955).
GOODMAN and GILMAN
THE Pharmacological Basis of Therapeutics
SECOND EDITION
Macmillan

Mallinckrodt Magnesium Trisilicate

... MANUFACTURED TO MAKE FORMULATING EASY

Through years of experience in manufacturing magnesium trisilicate, Mallinckrodt has learned to produce a superior product resulting in: (1) controlled bulk, (2) uniform white color, (3) uniform particle size and (4) consistent smoothness (freedom from grittiness).

Mallinckrodt Magnesium Trisilicate USP is an extremely effective antacid and adsorbent. It is inexpensive, tasteless, non-astringent, does not produce alkalosis, and is neither constipating nor laxative in therapeutic doses.

FOR QUALITY
IN YOUR FORMULATIONS

SPECIFY *Mallinckrodt*

MAGNESIUM TRISILICATE
BISMUTH COMPOUNDS
CALCIUM GLUCONATE
IODIDES
IRON SALTS
MERCURIALS
PHENOBARBITAL

Mallinckrodt Chemical Works

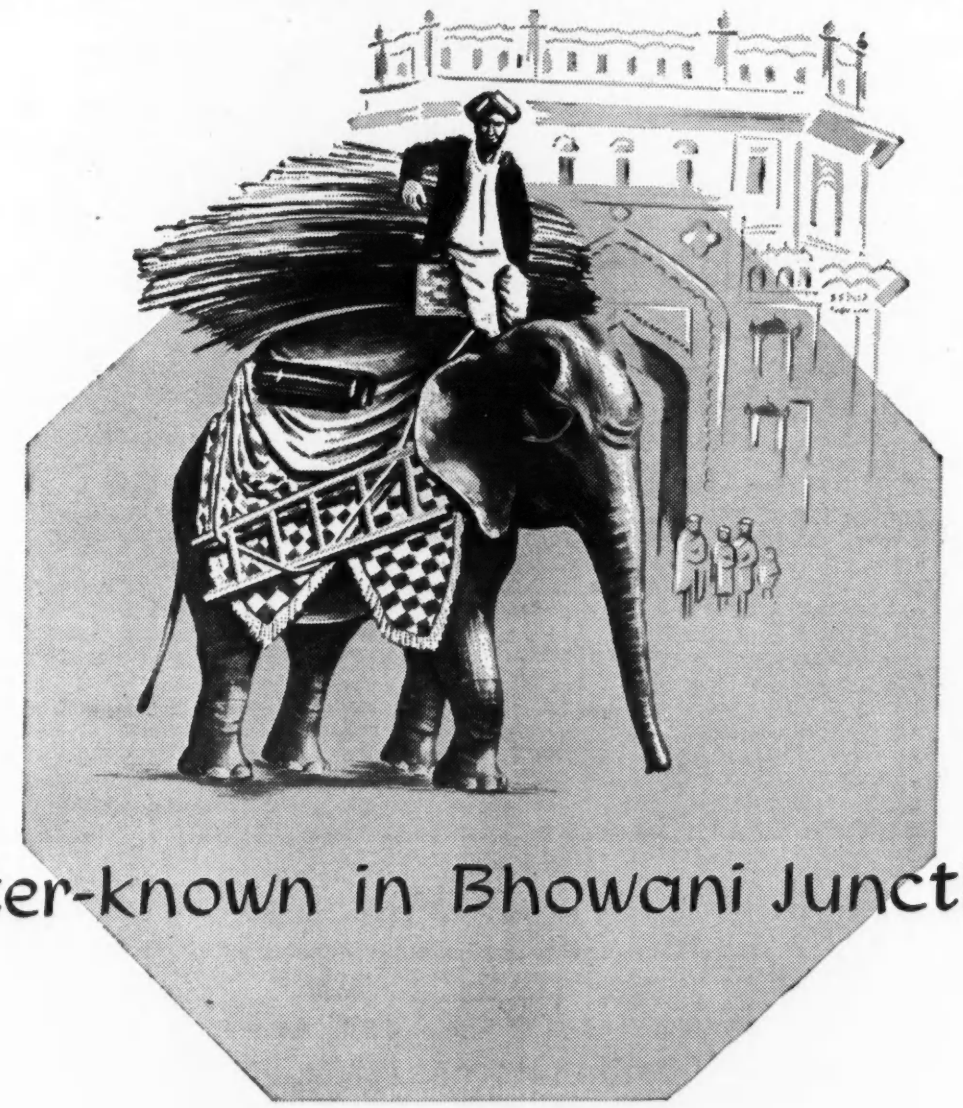
SECOND & MALLINCKRODT STREETS, ST. LOUIS 7, MO. • 72 GOLD STREET, NEW YORK 8, N. Y.
CHICAGO • CINCINNATI • CLEVELAND • DETROIT • LOS ANGELES • PHILADELPHIA • SAN FRANCISCO
IN CANADA: **MALLINCKRODT CHEMICAL WORKS LIMITED** • MONTREAL • TORONTO

Alcohol, n-butyl, tert-synthetic, dms., c.l., frt. alld	lb.	.14	—
t.c.l., frt. alld	lb.	.15	—
tanks, frt. alld.	lb.	.12	—
Caprylˡ, 85%, dms., c.l. and t.l., works	lb.	.19	—
t.t.l., same basis	lb.	.19½	—
tanks, frt. equald	lb.	.16½	—
sec., 92-99%, dms., c.l.	lb.	.22	—
t.c.l.	lb.	.23	—
tanks	lb.	.19½	—
Cetyl extra, fib cns., 500-lb. lots or more	lb.	.65	.72
NF, fib cns., 140-lb. lots or more	lb.	.48	—
Cinnamic, bots	lb.	2.15	2.75
Decyl mixed isomers, dms., c.l., dlvd	lb.	.23½	—
t.c.l. dlvd	lb.	.24½	—
tanks, dlvd	lb.	.21	—
perfume grade, bots	lb	1.75	2.00
normal (see 1-Decanol).			
Denat. CD-12, CD-13 CD-14, CD-17, dms., c.l., dlvd. E of Rockies	gal.	.64½	.66
t.c.l., same basis	gal.	.69½	.77
tanks, dlvd. same basis.	gal.	.48½	.50
Tankcar sales require written authorization by Alcohol and Tobacco Tax Div.			
Proprietary solvent, dms., c.l., dlvd. E of Rockies	gal.	.66	—
t.c.l., same basis	gal.	.71	.77
tanks, same basis	gal.	.50	—
Tankcar sales require written authorization by Alcohol and Tobacco Tax Div.			
SD1, dms., dlvd. E. of Rockies.	gal.	.66	—
t.c.l., same basis	gal.	.71	.77
tanks, same basis	gal.	.50	—
SD2B, dms., c.l., dlvd. E of Rockies	gal.	.64	—
t.c.l., same basis	gal.	.69	.75
tanks, same basis	gal.	.48	—
SD3A, dms., c.l., dlvd. E. of Rockies	gal.	.635	—
t.c.l., same basis	gal.	.685	.745
tanks same basis	gal.	.475	—
SD23A, dms. c.l. dlvd. E. of Rockies	gal.	.655	—
t.c.l., same basis	gal.	.705	.765
tanks, same basis	gal.	.495	—
SD23H, dms., c.l., dlvd. E. of Rockies	gal.	.66	—
t.c.l., same basis	gal.	.71	.77
tanks, same basis	gal.	.50	—
SD29, dms., c.l., dlvd. E. of Rockies	gal.	.645	—
t.c.l., same basis	gal.	.695	.755
tanks, same basis	gal.	.485	—
SD30, dms. c.l., dlvd. E. of Rockies	gal.	.63	—
t.c.l., same basis	gal.	.68	.74
tanks, same basis	gal.	.47	—
SD35A dms. c.l. dlvd. E. of Rockies	gal.	.665	—
t.c.l. same basis	gal.	.715	.775
tanks, same basis	gal.	.505	—
For anhydrous alcohol, on above formulas, prices are 7c. per gallon higher.			
SD40, dms., c.l., dlvd. E. of Rockies	gal.	.645	—
t.c.l., same basis	gal.	.695	.755
tanks, same basis	gal.	.485	—
West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon and Washington, where a 5c. differential on tankcars is maintained			
Diacetone acetone-free, dms., c.l., dlvd	lb.	.15	—
t.c.l., dlvd	lb.	.16	—
tanks, dlvd	lb.	.125	—
tech., dms., c.l., dlvd	lb.	.145	—
t.c.l., dlvd	lb.	1.55	—
tanks, dlvd	lb	.12	—
Ethyl, 190 pf., USP, tax paid, dms., c.l., dlvd. E. of Rockies	gal.	20.58	—
t.c.l. same basis	gal.	20.63	20.69
tanks same basis	gal.	20.42	—
tax free, dms., c.l., dlvd. E. of Rockies	gal.	.63	—
t.c.l. same basis	gal.	.68	.74
tanks, same basis	gal.	.47	—
absolute, 200 pt. tax paid, dms., dlvd. E. of Rockies	gal.	21.68	—
t.c.l., same basis	gal.	21.73	21.79
tanks, same basis	gal.	21.52	—
2-Ethylbutyl, dms. c.l. works	lb.	.30	—
t.c.l. works	lb.	.30¾	—
tanks, works	lb.	.28	—
2-Ethylhexyl, dms., c.l., dlvd. E.	lb.	.24½	—
t.c.l. same basis	lb.	.25½	—
tanks, same basis	lb.	.21¾	—
Furfuryl cns. works	lb.	.29	—
dms., c.l., Memphis, Tenn.	lb.	.20	—
Newark N J	lb.	.21½	—
t.c.l., Memphis, Tenn.	lb.	.21	—
Newark N J	lb.	.22½	—
tanks Memphis Tenn	lb.	.184	—
Hydroabietyl, tech., solid, Zone 1, dms., c.l., dlvd.	lb.	.29¼	—
t.c.l., dlvd	lb.	.29¾	.30¼
tanks, dlvd	lb.	.27¼	—
Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo. and the western part of Texas.			
Isoamyl dms. c.l. works, frt. alld. E	lb.	.28	—
t.c.l. same basis	lb.	.29	—
tanks same basis	lb.	.25	—
Isobutyl, dms., c.l., dlvd.	lb.	.15½	—
t.c.l., dlvd	lb.	.16½	—
tanks, dlvd	lb.	.13	—
Iso-octyl, dms., c.l., dlvd. E	lb.	.23½	—
t.c.l., dlvd E	lb.	.24½	—
tanks, dlvd E	lb.	.21	—
Isopropyl refd. 91%, dms., c.l., dlvd	gal.	.53	—
t.c.l., dlvd	gal.	.60	—
tanks, dlvd	gal.	.37	—
95%, c.l. dlvd	gal.	.55	—
t.c.l., dlvd	gal.	.62	—
tanks, dlvd	gal.	.39	—
99%, dms., c.l., dlvd.	gal.	.57	—
t.c.l. dlvd.	gal.	.64	—
tanks, dlvd	gal.	.41	—
Lauryl, bots.	lb.	2.00	2.50
Methyl (see Methanol).			
Methylamyl (see Methyl isobutyl carbinol).			
Octyl, perfumer's grade, bots	lb.	1.60	3.25
tech (see Octanol, normal).			
2-Phenylethyl, extra, dms	lb.	1.14	1.45
standard, dms	lb.	1.10	1.60
n-Propyl, dms., c.l., dlvd.	lb.	.13½	—
t.c.l. dlvd	lb.	.14½	—
tanks, dlvd	lb.	.11	—
Tetrahydrofurfuryl, dms., c.l. or t.l., f.o.b. Memphis, Tenn	lb.	.37	—
t.c.l or t.t.l. f.o.b Memphis, Tenn	lb.	.38	—
f.o.b. Newark, N. J	lb.	.40	—
tanks, dlvd E of Denver	lb.	.365	—
dlvd W of Denver	lb.	.375	—
Tridecyl mixed isomers, dms., dlvd	lb.	.26½	—
t.c.l. dlvd	lb.	.27½	—
tanks, dlvd	lb	24	—
Wood (see Methanol).			

Aldol, 95%, dms., works	lb.	.23	—
denaturing grade dms	gal.	2.15	—
Aldrin tech. fib dms. c.l., t.l., dlvd	lb.	.80	—
t.c.l. dlvd	lb.	.85	—
Aletris root, bgs	lb	1.75	1.85
Algin (see Sodium alginate).			
Alizarine (see 1,2-dihydroxy anthraquinone).			
Allethrin, 90% dms. frt alld	lb.	28.80	28.90
soln 20% dms. 200-2,000 lb lots, frt alld	lb	6.50	6.55
2½% dms. frt alld	lb	95	1.00
Allspice (see Pimento).			
Allyl bromide, cbys., works	lb	1.45	1.50
Chloride dms. c.l., dlvd	lb	17	—
t.c.l. dlvd	lb	18	—
tanks dlvd	lb	15	—
Aloe, Cape, cs	lb.	.50	—
powd., cs	lb.	.65	—
Curacao kgs	lb.	60	—
Aloin, USP bbls., dms., kgs	lb.	3.35	3.75
Alphanaphthol (see a-Naphthol).			
Alphanaphthylamine (see a-Naphthylamine).			
Alphanitronaphthalene (see a-Nitronaphthalene).			
Alphapicoline (see a-Picoline).			
Alphaterpineol (see a-Terpineol).			
Alphatocopherol (see a-Tocopherol).			
Alum, ammonium, gran. bgs., works	100 lbs.	4.30	—
lump dms. works	100 lbs	5.05	—
powd., dms., works	100 lbs.	5.20	—
USP, burnt, dms.	lb.	.20	.21
hydrous, dms.	lb.	.07¾	.08

Alum, potassium, gran., bgs., works	100 lbs.	4.55	—
lump, dms., works	100 lbs.	5.30	—
powd., dms., works	100 lbs.	5.45	—
USP, burnt dms	lb.	.20	.21
hydrous, dms	lb.	.07¾	.08
Potash-chrome dms	lb.	.17	—
Alumina calcined, bgs., c.l., works	lb.	.0455	—
t.c.l., works	lb.	.048	.0755
Aluminum acetate, basic soln., 24%, bbls., l.c.l., works	lb.	.14	—
Chloride, com'l, anhyd., dms., c.l., works, frt. equald	lb.	.16	—
l.c.l., works, frt. equald.	lb.	.16½	—
cryst., dms., c.l., works.	100 lbs.	16.00	—
l.c.l., works	100 lbs.	17.50	—
soln, 32°, cbys, c.l., works	lb.	.0445	—
l.c.l., works	lb.	.0520	.1290
tanks, works	100 lbs.	3.45	—
NF, gran., dms., works	lb.	.29	.30
Fluoride, tech., anhyd., bgs., c.l., works	lb.	.16¾	—
t.c.l., works	lb.	.17¾	.19¾
Aluminum fluoride in fib. dms. 0.35c. per lb. higher.			
Formate, basic soln., dms., c.l., works	lb.	.12	—
t.c.l., works	lb.	.12½	—
Hydrate, heavy, bgs., c.l., frt. frt. equald	lb.	.032	—
20,000-40,000 lb. lots, same basis	lb.	.0345	—
2,000-20,000 lb. lots, same basis	lb.	.0445	—
bulk, same basis	lb.	.0295	—
Hydroxide, gel, pharmaceutical, 14-15%, Al_2O_3, fib. dms., works	lb.	.22	—
contract, works	lb.	.21	—

Aluminum gel, 9-9½% Al_2O_3, fib. dms., works	lb.	.19	—
contract, works	lb.	.18	—
dried, USP XIV, fib. dms., works	lb.	.82½	—
contract, works	lb.	.79½	—
tech., powder (see Aluminum hydrate).			
Metal, 99%+ ingots, 10,000-lb. lots, frt. alld	lb.	.2710	—
pigs, 10,000-lb lots, frt alld.	lb.	.2500	—
Oxide, amorphous (see Alumina, calcined).			
Paste, lining, extra-fine, dms	lb.	.68	—
standard grade dms	lb.	48	—
Powder, lining extra, fine, dms.	lb.	1.09	—
standard grade, dms	lb.	78½	—
Aluminum powder and paste prices are f.o.b. shipping point. Add 1c. per lb. for 100-lb. dm., 1½c. per lb. for 50-lb dm., 3c. per lb. for 10-lb. can and 5c. to 12c. per lb for smaller containers. Deduct 1c. per lb for single shipment of 400 to 1,499 lbs., 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c for 30,000 lbs. or more. Where destination is within the continental U. S. a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs or over.			
Resinate, precip., 2.1% Al. dms.,	lb.	.33	—
Stearate, dibasic, ctns., c.l.,	lb.	.39	—
l.c.l.	lb.	.40	.44
monobasic, ctns., c.l.	lb.	.39	—
l.c.l.	lb.	.40	.44
tribasic, ctns., c.l.	lb.	.39	—
l.c.l.	lb.	.40	.44
Sulfate coml., bulk, c.l. works	100 lbs.	1.85	—
grd., bgs., c.l., works	ton	37.00	—
lump, bgs., c.l., works	ton	40.00	—



Penick recognized years ago that international trade must be a two-way street. So export and import became inseparable twins that now account for a substantial portion of our business. And because we obtain our basic materials from practically every civilized country in the world, we're frequently better-known in many parts of the world than we are at home.

S. B. PENICK & COMPANY 50 CHURCH ST., NEW YORK 8 735 W. DIVISION ST., CHICAGO 10

Aluminum sulfate, iron-free, bgs., c.l., works, frt. equald. 100 lbs. 3.55 - —
t.c.l. works, frt equald. 100 lbs. 3.95 4.55
Aluminum sulfate prices $1 per ton higher in the South.
USP, gran., dms., works lb .29 - .30
powd., dms., works lb. .36 - .37
Trihydrate, heavy (see Aluminum hydrate heavy)
Ambergris, gray, bots oz. 8.00 -10.00
p-Aminoacetanilide, frt. alld lb 1.57 —
Aminoazotoluene base bbls., 100% basis lb 1.03 1 18
Aminoethyl ethanolamine dms c.l., dlvd lb. 475 —
t.c.l. dlvd lb. 485 —
tanks, dlvd lb 45 —
2-Amino-2-methyl-1-propanol dms. c.l. frt alld lb 44 —
t.c.l. frt alld lb 45 —
tanks, frt alld lb 42 —
m-Aminophenol, dist., dms., ton lots. lb 2.05 - —
smaller lots lb 2.50 - —
p-Aminophenol dms. frt alld lb 1 15 - —
Aminophylline USP 100-lb dms lb 3 55 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald ton 80.00 - —
refrigeration tanks works frt equald ton 82 50 —
aqueous tanks, works, anhyd basis ton 83.00 —
Ammoniacal liquor (see Ammonia aqueous)
Ammoniac, sal gray bgs c.l. works, frt. equald 100 lbs 8.25 — —
t.c.l., same basis 100 lbs. 9.25 - —
white (see Ammonium chloride tech.)
Ammonium acetate, purif., dms lb. 41 - —
Benzoate USP dms., kgs. 4,000-lb. lots frt. alld lb 80 —
smaller lots frt. alld lb 83 1.08
Biborate gran. dms. c.l., works ton 319 50 —
ton lots, ex whse ton.397.00 - —
smaller lots, ex whse ton.402 00 —
Bicarbonate, dom., dms., c.l., works 100 lbs. 7.00 - —
t.c.l., works 100 lbs. 9 00 —
Bichromate dms works lb 42 42
Bifluoride, dms., dlvd lb. .2145- .2245
Bromide NF gran bbls lb 43 —
Powdered ammonium bromide 10c per lb higher
Carbonate, USP, lump dms lb .16 —
Chloride tech fine gran., bgs., c.l., works 100 lbs 5 75 —
t.c.l., works 100 lbs 7 75 8 20
USP gran bbls. dms lb 17¼ —
Citrate, dibasic bbls lb 77 —
Dichromate (see Ammonium bichromate)
Fluoride (see Ammonium bifluoride).
Hydroxide (see Ammonia accueous)
Hypophosphite, NF, dms. lb 3.07 —
Iodide NF dms bots lb 4 26 4 38
Linoleate 80% dms works lb 50 55
Nitrate dom., fert grade, 33.5% N., bgs., western works, frt equald base price ton.64.00 —
Imp. Canadian, 33 5% N. eastern, bgs., c.l. ship't point, frt. equald to $8 per ton base price ton.64.00 - —
August discount ton 5 00 —
western, bgs., c.l., f.o.b cars, Los Angeles ton 79 69 —
with dolomite, 20 5% N, bgs., Hopewell, Va ton 51 00 —
Oxalate, fine gran., dms lb. .26½- .31
Ammonium pentaborate, gran., bgs., c.l., works ton.187.50 - —
ton lots, ex whse ton.273.50 - —
smaller lots, ex whse ton.278.50 - —
Ammonium pentaborate powder $10 per ton higher
Persulfate kgs lb. 38 - 47½
Phosphate coml bgs. c.l., works, frt. equald lb. 09¼- —
t.c.l. same basis lb. 10 —
dibasic, NF, V bbls, dms lb. .46 - —
tech bgs c.l works frt. equald lb. 09¼- —
t.c.l. same basis lb. 10 —
Salicylate, NF, dms., kgs lb 1.62 1.64
Silicofluoride dms. works lb 11¾ 13¼
Sulfamate bgs c.l. t.l. works lb 18 —
t.c.l. works lb 22 —
Sulfate, coke-oven, bulk, producing ovens, base price ton.32.00 —
syn. bulk c.l. f.o.b works ton 32 00 42 00
purif., dms., works lb. .10 - .10½
Sulfide, liq., 40-44%, tanks, frt. equald., 100% basis ton.160.00 - —
Sulfocyanide tech (see Ammonium thiocyanate)
Thiocyanate tech dms., c.l., works lb. 20 —
t.c.l. works lb 22 26
Thioglycollate, coml., chys., 100% basis lb 1.35 1.65
highly purif. chys., 100% basis. lb. 1.70 1.96
Thiosulfate, cryst., photo grade, 6lb dms. frt alld lb 65 —

d-Amphetamine hydrochloride, dibasic bots lb 28.00 —
dl. dms lb 6 00 —
d-monobasic bots lb 28 00 —
d-Phosphate, dibasic, bots lb 28 00 —
dl dms lb 6 00 —
d-Sulfate, dms lb.28.00 —
dl dms lb 6 00 —
Amyl acetate ex fusel oil tech., dist. from 125° to 150°C, dms., c.l., frt. alld, E. of Rockies lb. .13½- —
t.c.l., same basis lb. .19½- —
tanks, same basis lb. .16 - —
syn., exo process, dms., c.l., dlvd lb. 19¾ - —
t.c.l., dlvd lb. .20¾- —
tanks, dlvd lb. .18 - —
ex pentane, reg. dms., c.l., dlvd. lb. 18½ - —
t.c.l., dlvd lb. .19½- —
tanks, dlvd lb. .16 - —
tech., dms., c.l., dlvd lb. .16½- —
t.c.l., dlvd lb. .17½- —
tanks, dlvd lb. .14 - —
Alcohol (see Alcohol, amyl)
n-Butyrate dms lb 1.00 1 25
Cinnamic, aldehyde, dms lb 1 70 2.20
Nitrite USP bots lb 1 75 1 83
Salicylate, cns. dms lb .82 1.10
o-tert-Amyl phenol, dms., c.l., works. lb. 49½ - —
t.c.l. works lb. 50½ - —
tanks works lb 47 - —
p-tert-Amyl phenol, dms., c.l., works. lb 26¾ - —
t.c.l. works lb .27¾ - —
tanks works lb 25¾ - —
Anethole, cns., dms lb. 1.60 - 1.80
tech dms lb 1 10 - 1 15
Angelica root, dom., bls lb. .80 .90
Aniline oil, dms., c.l. frt. alld lb. .22 - —
t.c.l., frt alld lb. .23 - —
tanks, frt alld lb. .21 - —
tankwagons, min. 2,000 gals. lb. .21½- —
Salt, dms., c.l. truckloads 20,000 lbs., min. frt. alld lb. .33 - —
t.c.l., same basis lb. .35 - —
Anise seed, Mexican, bgs lb. .25 - —
Spanish, bgs lb. .25 - —
Syrian, bgs lb. .25 - —
Anisic aldehyde, bots., dms lb 1.95 2.70
o-Anisidine dms. c.l., frt alld lb 80 - —
t.c.l. same basis lb 82 - —
tanks, same basis lb 78 - —
p-Anisidine dms works lb 97 - —
Annatto seed whole bgs lb 15 17
Anthracene 90-95% bbls, ton lots, works lb 83 - —
smaller lots works lb 95 - —
Anthraquinone 99.5% bbls c.l. frt. alld lb 83 - —
t.c.l., same basis lb. 86 - —
electrical grade bbls. t.c.l. same basis lb 91 - —
Antimony butter (see Antimony trichloride)
Metal bulk c.l., mines lb 33 - —
cs., c.l. mines lb 33½ - —
Oxide, bgs., c.l., frt. alld lb. .27 - —
t.c.l. frt alld lb 28½ - —
Sulfide approx 65% bgs. dlvd lb 23 26
Trichloride anhyd solid, pails. c.l. works lb 41 - —
t.c.l., works lb. .43 - —
Antimony potassium tartrate, tech. powd. dms lb. 69½- 74¼
USP, powd., dms lb. 74½- 75¼
Antipyrine NF 200-lb bbls lb 3.50 - —
Apomorphine hydrochloride, USP 25 oz. lots oz.35.60 - —
Areca nuts, powd., bbls lb 13 - —
Arecoline hydrobromide NF, bots., tins oz 4 50 6 00
l-Arginine monohydrochloride, dms., 1 kilo lots kilo 74 80 —
Arnica flowers (true Montana), bls. lb 2.25 - —
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls., c.l., works lb. .031 - —
Trioxide USP dms lb 48 - —
White, powd., bbls., c.l., works. lb. .04½- —
t.c.l., works lb. .06½- .07¼
Asafetida cn lb. 40 - —
powd., bbls., dms lb. 85 - —
Asbestine (see Talc, fibrous N. Y.)
Asbestos, Canadian, crude,
6D, c.l. (30 tons), mines ton 82.00 —
7D, c.l. (30 tons), mines ton 72.00 —
7F, c.l. (30 tons), mines ton 68 25 —
7H, c.l. (30 tons) mines ton 58 00 —
7K, c.l. (30 tons), mines ton 48.30 —
7M, c.l., (30 tons), mines ton 42.00 —
7R, c.l. (30 tons), mines ton 41 00 —
7RF c.l. (30 tons) mines ton 42 00 —
7T, c.l., (30 tons), mines ton 39 00 —
7TF c.l. (30 tons), mines ton 42.00 —
Asbestos c.l. prices are in U. S. funds t.c.l. lots $4 per ton higher
Asphalt gilsonite, black jet, bgs. c.l., mines ton 37 00 —
select 350° F fusing pt., bgs., c.l. mines ton 38 00 - —
270°-295°F. fusing pt., bgs. c.l., mines ton 37 00 —
seconds 300°-390°F fusing pt. bgs. c.l. mines ton 32 00 —
Manjak, No. 10, crude, dms., works lb. .06¼- —
Petroleum, cut-back, tanks, tankwagon, refy gal. .09 —
emulsion tanks tankwagon refy gal 09½- —
steam-refd., 50-80 penetration tanks tankwagon, refy ton 21 00 —
85-300 penetration, tanks, tank wagon refy ton 20 00 —
Aspirin (see Acid acetylsalicylic)
Atropine, USP, bots oz. 3.90 - 4.50
Sulfate, USP, bots lb. 2.10 - 2.55

B

Bacitracin bulk 1,000,000,000 or more units 50,000 units 70 —
less than 1,000,000,000 units. 50,000 units 75 —
Balm of Gilead buds, dried bgs lb 1 35 1 45
Barberry root bark, bgs lb 28 34
Barbital, NF, 100-lb. dms lb. 4.50 —
Sodium, NF, dms lb. 4.75 —
Barium carbonate precip., bgs. c.l., works ton 100 00 —
smaller lots works ton 110.00 —
Chlorate kgs. works lb 32 36
t.c.l. t.t.l. frt equald ton 285 00 —
Chloride anhyd bgs. c.l. works ton 165 00 —
t.c.l. works ton 175 00 —
NF, cryst., 100 lb dm lb. 22 - —
tech. cryst. bgs. c.l. works 100 lbs 6.50 —
t.c.l. works 100 lbs 7 00 —
Chromate, bgs., frt. equald lb. .33 - —
Dioxide (see Barium peroxide)
Hydrate, cryst., bgs., c.l., t.l., frt. equald ton.208.00 - —
t.c.l. t.t.l. frt equald ton.218 00 —

Here, even our best friends all too often associate Penick with botanicals alone *although more than three-quarters of our business is in manufactured products!*

From Penick plants flows a diversified range of drugs and fine chemicals* used by more than a hundred different industries. Many are derived from the botanicals for which we are famous. Alkaloids and extracts are good examples. They're used in medicine, foods, cosmetics and in some of our most important pesticides. Others such as our line of specialized antibiotics are nowise related to botanicals.

The essential fact is that Penick offers you a single source for many different chemical needs. You benefit by our broad experience in many related fields. Problems in one are frequently solved by knowledge gained in another. If you do not know all the ways we can serve you, we should be happy to tell you more. A letter outlining your particular interest will bring prompt response.

on than we are in Boston?

**and many fine chemicals also available from our affiliate, The New York Quinine & Chemical Works, Inc.*

PENICK

Manufacturers of Fine Chemicals and Drugs

Barium monoxide (see Oxide).
Nitrate, bbls., c.l., t.l., dlvd lb .16 - —
l.c.l., l.t.l., dlvd lb .17 - —
Oxide, grd. dms., c.l., t.l., frt. equald ton 275.00 - —
Peroxide dms. frt equald lb .20 - —
Stearate, ctns., c.l., frt. alld lb .41 - —
l.cl. same basis lb .42 - .46
Sulfate, tech. (see Barytes and blanc fixe).
X-ray dms lb .15 - .15½
Sulfide, dms., c.l., works ton 85.00 - —
l.c.l. works ton 95.00 - —
Barytes, Southern, off-color, bgs., mines ton 25.00 - —
95-75% bgs. mines ton 25.00 - —
water-grd., paper bgs., c.l., St Louis ton 49.00 - —
ex-whse. N. Y. ton 70.85 - —
Bauxite, bulk mines ton 6.75 - 10.00
Bay leaves (see Laurel leaves)
Belladonna leaf, bls lb .35 - .37
root, bls lb .45 - .50
Bentonite dom., 200 mesh, bgs. c.l., mines ton 14.00 - —
imp. Italian, white, high gel., bgs 5-ton lots, ex whse ton 84.00 - —
1 ton lots, ex whse ton 87.00 - —
low gel., bgs., 5-ton lots, ex whse ton 82.35 - —
1 ton lots ex whse ton 85.35 - —
Benzal chloride, chys., works lb .44 - —
Benzaldehyde, NF dms lb .74 - 1.05
tech., chys., dms., t.l. lb .43 - —
smaller lots lb .44 - —

Benzene (see Benzol).
Hexachloride, 25% and 99% gamma isomer (see Lindane), tech., high gamma, dms., c.l., dlvd., gamma unit-lb .0075 - .008
l.c.l., works, gamma unit-lb .009 - .0095
low gamma, dms., c.l. dlvd.,, gamma unit-lb .0075 - —
l.c.l., works, gamma unit-lb .009 - —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb 1.19 - —
l.c.l., same basis lb 1.21 - —
Sulfate, tech., frt. alld., 100% basis lb 1.21 - —
Benzocaine, dms lb 3.48 - 3.50
Benzol, coaltar, pure or nitration tanks, works:—
Bethlehem, Pa gal .36 - —
Birmingham district gal .36 - —
Chicago district gal .36 - —
Cleveland district gal .36 - —
Geneva, Utah gal .36 - —
Johnstown, Pa. gal .36 - —
Lackawanna, N. Y. gal .36 - —
Lone Star, Texas gal .36 - —
Lorain, Ohio gal .36 - —
Middletown, Ohio gal .36 - —
Minnequa, Colo gal .36 - —
Philadelphia district gal .36 - —
Pittsburgh district gal .36 - —
Sparrows Point, Md gal .36 - —
Syracuse, N. Y. gal .36 - —
Terre Haute ind. gal .36 - —
Youngstown, Ohio gal .36 - —
Petroleum, 2°, Houston gal .38 - —

Benzophenone, dms lb 1.40 - 1.70
Benzotriazole, tech., dms., 1,000-lb. lots, works lb 2.25 - —
Benzotrichloride, chys, 1,000-lb lots or more, frt. equald lb .18 - —
smaller lots, frt. equald lb .20 - —
Benzoyl chloride, chys. dms., c.l., works, frt. equald lb .22 - —
l.c.l., same basis lb .23 - —
tank trucks, dlvd. Metropolitan area lb .21 - —
Peroxide, purit. fib. dms., 50 to 1,000-lb. lots, works lb .98 - 1.08
Benzyl acetate f.f.c., cns., dms lb .60 - 1.00
Alcohol (see Alcohol, benzyl)
Benzoate, NF, f.f.c., 500 lb. dms. lb .62 - —
Chloride, tech., 13-gal. chys., dms., c.l., works, frt. equald. lb .23 - —
t.c.l. same basis lb .24 - —
tank trucks, dlvd. Metropolitan area lb .21 - —
A 2½c differential is quoted on benzyl chloride in 5-gal chys. in steel dms prices were ½c lower
Cinnamate, cns lb 3.60 - 3.90
Dimethylamine, dms., works lb 2.25 - —
Formate, cns lb 1.80 - 2.10
Isoeugenol, cns lb 9.85 - —
Propionate, bots lb 1.35 - 1.65
Salicylate, bots lb 1.60 - 1.85
Benzylidine acetone, bots lb 1.75 - 1.80
Chloride (see Benzal chloride).
Berberine bisulfate cns lb 35.00 - 36.25
Hydrochloride, bots lb 35.00 - 36.25
Betaine, anhyd., 10,000-lb. lots, frt. alld lb 3.00 - —
Hydrochloride, 5,000-lb. lots, frt. alld lb 1.60 - —
Monohydrate, 10,000-lb. lots, frt. alld lb 2.60 - —
Betagammapicoline (see b.g-Picoline).
Betamethylnaphthalene (see b-Methylnaphthalene)

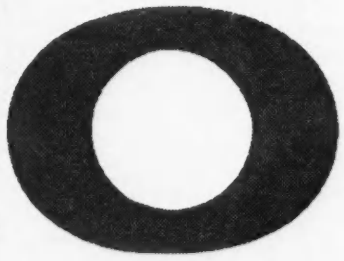
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphthylamine).
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, technical)
Biotin cryst., bots gram 10.00 - —
Biphenyl (see Diphenyl).
Bismuth chloride, jars lb 5.11 - —
Hydroxide, dms lb 4.65 - —
Metal, bxs. ton lots lb 2.25 - —
Nitrate, cryst., dms. lb 2.10 - 2.17
Oxide, anhyd., dms lb 4.47 - 5.05
Oxychloride, dms lb 4.37 - 4.42
Phenolsulfonate, fib dms lb 5.22 - —
Subcarbonate, USP, dms. lb 3.20 - —
Subgallate, NF, fib dms. lb 3.15 - —
Subiodide, fib. dms lb 5.37 - —
Subnitrate NF, dms lb 2.65 - —
Subsalicylate USP dms lb 3.50 - —
Bismuth-ammonium citrate, USP, nowd jars lb 4.22 - —
Bisphenol-A, c.l., t.l. frt alld lb 29¾ - —
l.c.l., same basis lb 30¾ - —
Black, acetylene imp bgs. c.l., duty and freight extra lb .19 - —
cs., l.c.l., ex whse lb .24½ - .30
Ash (see Barium sulfide)
Bone dms. t.c.l. frt alld lb 17 - 23¼
Pacific coast bone black prices 2c per lb higher
Carbon, channel, pigment, high color beads ctns. c.l. works. lb .72 - —
t.c.l. dlvd or whse lb .78 - —
medium color, uncompressed bgs. c.l. works. lb .12 - —
t.c.l. dlvd or whse. lb .19 - —
rubber, beads bulk, c.l., works lb .07 - —
bgs. c.l., works lb .074 - —
l.c.l., works lb .1225 - —
furnace fast extruding, bgs., c.l., works lb .06 - —
ctns. t.c.l. whse lb .10 - —
high abrasion, bulk c.l. works. lb .0750 - —
bgs., c.l. works lb .0790 - —
l.c.l., dlvd or whse lb .122 - .125
high modulus, bgs., c.l., works. lb .0550 - —
ctns. t.c.l. whse lb .0950 - —
semi-reinforcing bgs., c.l., works lb .045 - —
bgs. ctns. t.c.l., whse lb .085 - —
Charcoal (see C).
Dyes (see Dyes).
Graphite (see G).
Iron oxide, pure bgs., c.l., works. lb .13¼ - —
t.c.l. works lb .13½ - —
Lamp, bgs., c.l., works lb .16 - .45
Mineral bgs., works lb .0160 - .0675
Blackberry root bark, bls lb .45 - —
Black haw root bark, bls lb .63 - .65
tree bark, bls lb .45 - .50
Blanc fixe, direct process, bgs., c.l., works ton 110.00 - —
t.c.l., works ton 120.00 - —
N. Y. whse ton 155.00 - —
Blood, dried, 16-16½% ammonia, unit-ton 5.25 - —
high-grade, unground, 16-17% ammonia, bgs., Chicago unit-ton 6.00 - —
soluble, bgs., c.l. lb .13 - .14
t.l. lb .15 - .17
t.t.l. lb .15½ - .35½
Bloodroot bls lb .48 - .50
Blue, alkali, dry, 250-lb. bbls., dlvd. N. of Tenn. and N. C., E. of Miss. R. including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb 2.25 - —
toner, litho flushed, 125-lb. bbls., same basis lb 1.28 - —
Cobalt, genuine, bbls., same basis. lb 4.90 - —
Imitation (see Blue, ultramarine)
Dyes (see Dyes).
Iron, reg., bbls., c.l., same basis lb .52 - —
l.c.l., ton lots, same basis lb .53 - —
smaller lots, same basis lb .54 - —
alkali-resisting, bbls., c.l., same basis lb .57 - —
l.c.l., ton lots, same basis. lb .58 - —
smaller lots, same basis. lb .59 - —
Methyl, violet toner molybdated, PMA, bbls., same basis lb 2.80 - —
tungstated, PTMA, bbls., same basis lb 4.35 - —
Peacock, fugitive, 100% color strength, bbls., same basis lb .90 - —
Phthalocyanine, full strength, bbls., same basis lb 3.45 - —
resinated, bbls., same basis lb 3.00 - —
water dispersable, bbls., same basis lb 1.69 - —
Ultramarine, cobalt type, dry or pulp, bbls., same basis lb 39½ - .35
jobbing types, bbls., same basis. lb .19 - —
regular types, dry, bbls., same basis lb .22½ - .35
Victoria toner, molybdated, PMA, bbls. lb 4.50 - —
tungstated, PTMA, bbls. lb 5.55 - —
Blue dry colors, dlvd. prices ½c higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c. higher. Pac. Coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equalized with Chicago
Vitrol (see Copper sulfate).
Bluestone (see Copper sulfate).
Bonemeal, steamed, works, E. ton 60.00 - —
Los Angeles ton 82.50 - —
Bone phosphate, defluorinated (see D) of lime (see Calcium phosphate, tribasic).
precipitated (see Calcium phosphate tribasic, NF precip.)
Borax, tech., anhyd., 99%, bgs., c.l., works ton 83.00 - —
ton lots ex whse. N. Y. or Chi. ton 137.25 - —
smaller lots, same basis. ton 142.25 - —
bulk, c.l., works ton 74.00 - —
cryst., 99½%, bgs., c.l., works. ton 71.00 - —
ton lots, ex whse. N. Y. or Chi. ton 125.25 - —
smaller lots, same basis. ton 130.25 - —
gran., decahydrate, 99½%, bgs., c.l., works ton 45.00 - —
ton lots, ex whse. N. Y. or Chi. ton 99.25 - —
smaller lots, same basis. ton 104.25 - —
bulk, c.l., works ton 38.50 - —
Pentahydrate, 99%, bgs., c.l., works ton 60.00 - —
ton lots, ex whse, N. Y. or Chi. ton 114.25 - —
smaller lots, same basis. ton 119.25 - —
bulk, c.l., works ton 53.50 - —

Oxygen doesn't always mean "life"

Eastman antioxidants are extending the useful life of products in many fields

Many products need protection *against* oxygen.

Lard, a typical example, turns rancid at room temperatures unless protected by the addition of an antioxidant. "Returns" and complaints of off-flavor and rancidity have long been the bane of vendors of shelled nuts. Today, thanks to the availability of an Eastman antioxidant, nut



processors can practically eliminate such complaints and greatly expand their product's distribution. The longer shelf life made possible by Eastman antioxidants, has likewise helped potato chip manufacturers broaden their selling area.

Eastman antioxidants have also helped to develop a new outlet for inedible fats and oils . . . animal feeds. Added to feed in amounts up to 4% to 5%, these fats improve the feed and represent a market of 200-300 million pounds annually. This was a totally new market for fats and helped ease a fat-surplus problem for the meat industry. Yet, it would have been impossible if antioxidants had not been available to stabilize the fat and keep the feeds fresh and palatable.

Eastman antioxidants protect many different food products, but an even broader field is covered by their use in industrial products.

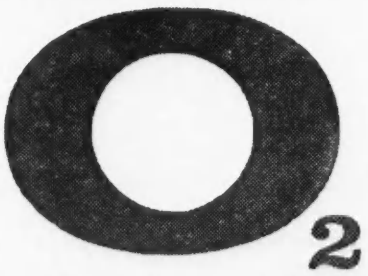
In gasoline and motor fuels, antioxidants made by Eastman protect against the formation of power-robbing gum.

In transformer and turbine oils, Eastman antioxidants extend service life by preventing the quick breakdown that might otherwise occur at the high working temperatures encountered.

In plastics, Eastman antioxidants help stabilize plasticizers for vinyl resins and are also used to protect polyethylene against deterioration during molding and extrusion and upon extended exposure.

In rubber, antioxidants play a well-known role in protecting against aging and heat deterioration. Rubber also needs protection against ozone – one of the most powerful oxidizing agents known. Even the minute concentration of ozone in the atmosphere can severely damage rubber products. To combat this attack, Eastman antiozonants are available.

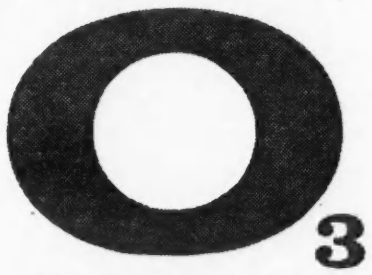
In the agricultural field Eastman antioxidants are extending the effectiveness of such important pesticides



as pyrethrum. In poultry feeds other Eastman antioxidants are widely used to bring more chicks to faster and more profitable maturity by protecting vitamin content, stimulating growth, improving pigmentation, increasing the utilization of Vitamin A from carotene and safeguarding chicks against such deficiency diseases as encephalomalacia.

This list could be continued to show that whenever oxygen poses a destructive threat to organic compounds there is a good chance that an Eastman antioxidant is available for effective counter measure.

Perhaps one of the many antioxidants made by Eastman could help you add life to some product you



make or use. Perhaps, as the foregoing examples illustrate, one of these antioxidants could help you combat rancidity, bad odor, off-flavor, loss of nutrient value, discoloration, embrittlement or aging.

Eastman antioxidants have helped many companies extend present markets and even develop new markets. If your product – be it food, agricultural or industrial–needs protection against oxidative deterioration, call in Eastman. Eastman's food and industrial antioxidant laboratories are staffed with specialists anxious to help you explore the benefits, the use, and the cost of antioxidants.

For more information, write to EASTMAN CHEMICAL PRODUCTS, INC., a subsidiary of Eastman Kodak Company, KINGSPORT, TENNESSEE.

Products in these fields know the value of Eastman antioxidants

FOOD	INSECTICIDES
RUBBER	ANIMAL FEEDS
PLASTICS	HYDRAULIC FLUIDS
PETROLEUM	TRANSFORMER OILS
VEGETABLE and ANIMAL OILS	

Eastman ANTIOXIDANTS

to combat oxidative deterioration

SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tennessee; New York City; Framingham, Mass.; Cincinnati; Cleveland; Chicago; St. Louis; Houston. **West Coast: Wilson Meyer Co.,** San Francisco; Los Angeles; Portland; Salt Lake City; Seattle.

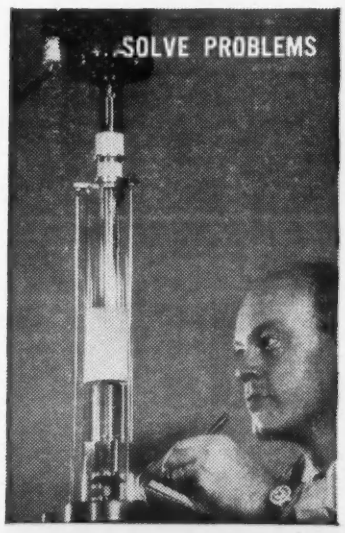
Borax, tech., powd., bgs., c.l., works.	ton.	50.00	—
ton lots, ex whse. N. Y. or Chi.	ton.	104.25	—
smaller lots, same basis.	ton.	109.25	—
USP borax $15 per ton higher.			
Bordeaux mixture, bgs., c.l., works, frt. alld. or nearest whse. pt.	lb.	.18 -	.24
l.c.l., same basis	lb.	.19 -	.26
Borneol, cns	lb.	2.50 -	4.50
Boron trifluoride gas, cyls., truckload, works	lb.	.62 -	—
l.t.l., works	lb.	.70 -	—
Brazilwood extract (see Hypernic extract).			
Brimstone (see Sulfur).			
Bromine, purif., cs., c.l., t.l., dlvd. E. of Rockies	lb.	.32 -	—
l.c.l., same basis	lb.	.34 -	.39
ret. dms., c.l., t.l. dlvd E of Rockies	lb.	.31 -	—
l.c.l., same basis	lb.	.31 -	.33
tanks, same basis	lb.	.22½-	—
Bromochloromethane, dms., c.l., frt. equald	lb.	.48 -	—
l.c.l., same basis	lb.	.50 -	—
Bromoform, pharmaceutical grade, bots	lb.	1.62 -	2.60
cbys.	lb.	1.52 -	—
Bromstyrol, bots	lb.	5.40 -	5.70
Bronze powder aluminum (see A).			
Brown iron oxide pure bgs., c.l., works	lb.	.14¼-	—
l.c.l., works	lb.	.14½-	—
Oxide, metallic, bgs., works	lb.	.04 -	—
Sienna, burnt, paper bgs., c.l., works	lb.	.06¼-	.17¼
l.c.l., works	lb.	.06½	.17½
raw, paper bgs., c.l., works	lb.	.06¼-	.16¼
l.c.l., works	lb.	.06½-	.16½
Umber, burnt, American, c.l., works	lb.	.07 -	.07¾
l.c.l., works	lb.	.07¼-	.08
Turkey type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y.	lb.	.07¾ -	—
raw, American, bgs., works	lb.	.07½-	.08¼
Turkey-type, bgs., works	lb.	.06¾-	.07
Vandyke, bbls., works	lb.	.09½ -	.12
Brucine, cns., 100-oz. lots	oz.	.20 -	.25
Sulfate, NF, cns., 100-oz. lots	oz.	.15 -	.20
Buchu leaves, bls	lb.	1.30 -	—
Butadiene, refd., cyls., c.l., refy	lb.	.21 -	—
l.c.l., refy	lb.	.22 -	—
tanks, refy	lb.	.15 -	—
Butane, indust., tanks, group 3	gal.	.03 -	—
n-Butyl acetate ferment., dms., c.l., frt. alld	lb.	.16½-	—
l.c.l., same basis	lb.	.17½-	—
tanks, same basis	lb.	.14 -	—
syn., dms., c.l., dlvd. E	lb.	.16½-	—
l.c.l., same basis	lb.	.17½-	—
tanks, same basis	lb.	.14 -	—
sec-Butyl acetate syn. dms., c.l., dlvd. E	lb.	.13½-	—
l.c.l., same basis	lb.	.14¼-	—
tanks, same basis	lb.	.11¾-	—
Butyl alcohol (see Alcohol, n-Butyl).			
Aldehyde (see Butyraldehyde).			
Chloride, dms., c.l., works	lb.	.37½-	—
l.c.l., works	lb.	.38¼-	—
Ether, dms., c.l., works	lb.	.33 -	—
l.c.l., works	lb.	.33¾-	—
tanks, works	lb.	.31 -	—
Lactate, dms., c.l., frt. alld. E. of Rockies	lb.	.42½-	—
l.c.l., same basis	lb.	.43½-	—
tanks, same basis	lb.	.40 -	—
Laurate, dms., works	lb.	.37½-	—
Methacrylate dms. c.l. t.l., works.	lb.	.55 -	—
l.c.l., works	lb.	.55½-	—
Oleate, refd., dms., l.c.l., works.	lb.	.32 -	—
Phenylacetate, dms.	lb.	4.50 -	4.60
Phthalate (se Dibutyl phthalate).			
Stearate, dms., frt. alld. E. of Mississippi	lb.	.26 -	—
l.c.l., same basis	lb.	.26½-	—
Butylamine (see mono-, di- and tri-).	lb.	.25 -	—
6-tert-Butyl-m-cresol, dms., c.l., works	lb.	.55 -	—
l.c.l., works	lb.	.56 -	—
tanks, works	lb.	.54 -	—
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).			
p-tert-Butylphenol, bgs., c.l., works.	lb.	.27½-	—
l.c.l.	lb.	.28½-	—
Butyraldehyde, dms., c.l., dlvd.	lb.	.22 -	—
l.c.l., dlvd.	lb.	.23 -	—
tanks, dlvd.	lb.	19½ -	—
Butyric ether (see Ethyl butyrate).			

C

Cacao butter (see Cocoa butter).			
Cadmium iodide 25-lb. fib. dms.	lb.	6.75 -	7.00
Metal ingots or sticks, cs., dlvd.	lb.	1.70 -	—
Caffeine, USP, nat., cryst., anhyd., dms., 100-lb. lots or more	lb.	3.00 -	—
hydrous, dms., 100-lib. lots or more	lb.	2.80 -	—
syn., cryst., anhyd., dms., 100-lb. lots or more	lb.	3.00 -	—
hydrous, 100-lb. lots or more	lb.	2.80 -	—
Citrated, USP, dms., 100-lb. lots or more	lb.	2.70 -	—
Calamine, USP, dms	lb.	.34 -	—
Calciferol, cryst., vials, 1-kilo lots, works	gram.	.60 -	—
25 to 100 gram lots, works.	gram.	.65 -	—
in edible oil (see Viosterol)			
Calcium p-aminosalicylate, fib. dms., 100 lbs or more, frt. adjusted.	lb.	4.00 -	—
Arsenate, dealers, bgs., c.l., frt. alld	lb.	.09 -	.09½
Bromide, NF, 100 lbs. or more	lb.	.92 -	—
Carbide, standard generator size, dms., c.l., dlvd.	ton.	134.40 -	—
Carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works	ton.	10.50 -	—
chalk, whiting, 325 mesh, bgs., c.l., works	ton.	32.00	-34.00
l.c.l., same basis	lb.	.10 -	.10½
water-grd., ½ to 10 microns, bgs., c.l., works	ton.	30.00 -	—
10 to 20 microns, bgs., c.l., works	ton.	17.00	-18.00
precip., dense, bgs., c.l., works.	ton.	32.50 -	—
l.c.l., works	ton.	42.50 -	—
medium, bgs., c.l., works	ton.	38.00 -	—
l.c.l., works	ton.	48.00 -	—
surface treated, bgs., c.l., works	ton.	37.50 -	—
l.c.l., works	ton.	47.50 -	—
ultrafine, bgs., c.l., works.	ton.	110.00	-160.00
l.c.l., works	ton.	120.00	-175.00
Chloride, cryst. purif., dms	lb.	.27 -	—
flake, 77-80%, paper bgs., c.l., works, frt. equald	ton.	29.00 -	—
liquor, 40%, tanks, frt. equald.	ton.	12.33-	—
pellets, bgs., c.l., works	ton.	35.40 -	—
powd., bgs., c.l., works	ton.	35.00 -	—
solid, 73-75%, dms., c.l., frt. equald	ton.	27.50 -	—
l.c.l., works, frt. equald.	ton.	34.00	-71.00
USP, gran., dms.	lb.	.32 -	—
Calcium chromate, bgs., frt. equald.	lb.	.29½-	.30
Chromate, bgs., frt. equald.	lb.	.29½-	.30
Cyanide, dms., c.l., dlvd. E. of Rockies	lb.	.20 -	—
l.c.l., same basis	lb.	.24 -	.55
Cyclamate, 100-lb. fib. dms.	lb.	2.95 -	—
Gluconate, AA, bbls., dms.	lb.	.74 -	.76
USP, bbls., dms	lb.	.67 -	.69
Hydride, dms., works	lb.	2.15 -	3.00
Hypochlorite, high test, 45-lb. cs., dlvd. E. of Rockies	cs.	22.95	-25.10
100-lb. dms., same basis	dm.	30.80	-34.50
Hypophosphite, dms., 1,000-lb. lots.	lb.	1.28 -	—
Iodide, jars	lb.	4.57 -	—
Lactate, NF, dms., 10,000-lb. lots or more, works	lb.	.36 -	.40
Mandelate, USP, dms., works	lb.	2.10 -	2.25
smaller lots, works	lb.	.41 -	.48
Naphthenate liq., 4% Ca., dms., frt equald	lb.	.27¼-	—
Nitrate, fertilizer grade, bgs., c.l., Los Angeles	ton.	46.00 -	—
tech., 5-dm. lots, works	lb.	.13 -	—
Pantothenate, dms., bots., frt. adjusted, gram.		.045 -	—
Para-aminosalicylate (see Calcium p-Aminosalicylate)			
Phenolsulfonate, dms	lb	.70 -	—
Phosphate, dibasic, USP, bgs., c.l., frt. equald., 100 lbs.		7.75 -	—
t.c.l., frt. equald., 100 lbs.		8.50 -	—
feed grade, 18½%P, bgs., c.l., t.l., frt. equald.	ton.	79.55	-83.25
t.c.l., frt. equald.	ton.	89.55	-93.25
21% P, bgs., c.l., t.l., frt. equald	ton.	94.50	—
t.c.l., frt. equald	ton.	99.50	-104.50
monobasic, bgs., 10,000-lb. lots, frt. equald., 100 lbs.		7.20 -	—
smaller lots, same basis, 100 lbs.		7.70 -	—
tribasic, NF precip., bgs., c.l., works, frt. equald., 100 lbs.		9.25 -	—
t.c.l., frt. equald., 100 lbs.		10.50 -	—
Calcium phytate, bgs., works	lb.	.50 -	—
Resinate precip. dms. frt. alld., works	lb.	.30½-	—
Silicate, hydrated, bgs., c.l., works.	lb.	.06 -	—
t.c.l., works	lb.	.06½-	—
paint grade (see Wollastonite).			
Stearate, ctns., c.l.	lb.	.39 -	—
l.c.l.	lb.	.40 -	.44
Sulfate (see Gypsum).			
Calomel, USP, powd., dms.	lb.	5.42 -	—
Camphene 46° m.p., dms., incl., c.l., works	lb.	.15 -	—
l.c.l. same basis	lb.	.16½-	—
tanks, same basis	lb.	.12½-	—
Chlorinated, 67-69% (see Toxaphene).			
Camphor monobromated, NF, dms., kgs.	lb.	3.50 -	—
nat. USP powd. cs., 100-lb. lots.	lb.	.60 -	.65
tablets, 1-oz., ½-oz. cs	lb.	.85 -	.90
syn., tech., 1 bbl. or more	lb.	.48 -	—
USP, gran., powd., bbls., 2,000-lb. lots	lb.	.59 -	—
1,000-lb. lots	lb.	.60 -	—
smaller lots	lb.	.61 -	—
tablets, tins, 2,000-lb. lots	lb.	.90 -	—
1,000-lb. lots	lb.	.91 -	—
smaller lots	lb.	.92 -	—
Canada balsam (see Fir balsam).			
Cantharides, Chinese, cs	lb	2.00	2.05
powd., bxs	lb	2.25	2.30
Russian, bgs	lb	4.00	4.05
powd., bxs	lb.	4.35	4.40
Capsicum (see Pepper red).			
Oleoresin NF from domestic pepper, dms	lb	4.50	5.25
from African pepper, dms	lb	4.35	5.00
Caraway seed, Dutch, bgs.	lb.	.17	—
Carbazole 97%, bbls. ton lots, works	lb	1.05	—
Carbon black (see Black, Carbon).			
Dioxide, indust., wholesale, bulk, dlvd. Metropolitan area	ton.	73.00	115.00
cyls. same basis	lb	.08	.09
solid, same basis	lb.	.035	.040
Disulfide, 55-gal. dms., c.l., works, frt. equald to competitive points	lb.	.07	—
l.c.l. same basis	lb	08½	.09
5-gal. dms. 30 dms to c.l., same basis	lb	.13	—
less than 30 dms	lb	.16	—
tanks, dlvd	lb	0545	—
Tetrachloride, CP, consumers, dms., l.c.l., frt. alld.	lb.	.12¼-	.14½
tech. consumers dms. c.l., frt. alld	lb.	.11¼	—
l.c.l. frt. alld	lb.	.13½-	—
tanks, frt. alld	lb.	.10 -	—
Carboxymethyl cellulose (see CMC).			
Carbromal NF dms. 100-lb lots, works	lb	4.00	4.25
smaller lots, works	lb	4.10	4.75
Cardamom seed, bleached "A"	lb	3.20	—
"B"	lb	3.10	—
decorticated, Ceylon, cs	lb.	3.00	—
Guatemalan, cs	lb.	3.00	—
green, Alleppey, bgs	lb.	2.15	—
Ceylon, bgs	lb	2.15	—

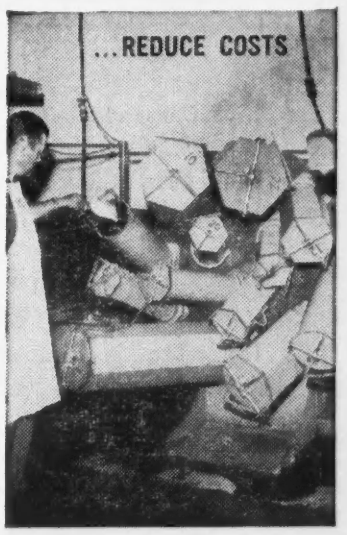
HOW HERCULES HELPS...

SCHOLARSHIP WINNERS—Six national winners in the 4-H Entomology Program are pictured with Hercules Vice President Paul Mayfield. Hercules sponsors this program each year to promote a better understanding of insect life and its relation to health and national wealth. Awards include 6 college scholarships, state and county prizes.



FOAM CONTROL is important in many industries, including paper making. To assist in solving problems, Hercules developed this foam tester, which can be used in mills to determine which of the many Hercules defoamers best fits the exact requirements of the mill.

TUMBLING COMPOUNDS play a key role in precision barrel finishing of metal parts. Metal cleaners based on Hercules® CMC are used in tumbling compounds to improve quality and lower cost. This is just one example of the usefulness of CMC—the versatile film-former, suspending agent, water binder and viscosity control agent.



HERCULES
CHEMICAL MATERIALS FOR INDUSTRY

HERCULES POWDER COMPANY
INCORPORATED
951 Market St., Wilmington 99, Del.

G57-1

SYNTHETIC RESINS, CELLULOSE PRODUCTS, CHEMICAL COTTON, TERPENE CHEMICALS, ROSIN AND ROSIN DERIVATIVES, CHLORINATED PRODUCTS, OXYCHEMICALS, EXPLOSIVES, AND OTHER CHEMICAL PROCESSING MATERIALS

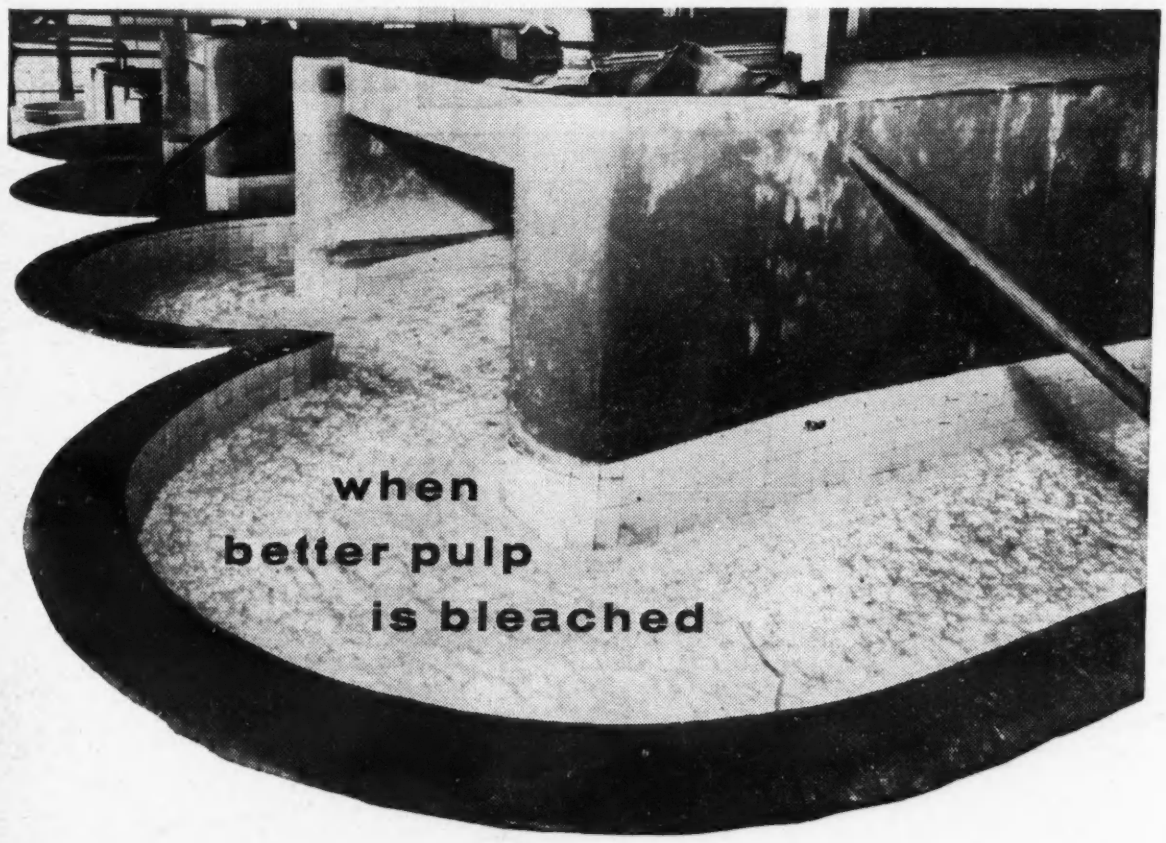
Carmine No. 40—Cobalt Oxide

Carmine No 40, NF, bulk, 100-lb lots or more, dlvd lb.16.80 - —
smaller lots, dlvd lb.16.90 -17.30
Carotene tech., 1,350,000 A units per gram tins, 5-10 kilo lots, dlvd gram .295 - —
in carrot oil, 5,000,000 to 8,000,000 A units per lb dms., works million units .12 - —
microcrystalline in oil, 400,000 A units per gram dms, dlvd, million units .21 - —
b-Carotene, pure crystalline, 1,600,000 A units to 1,870,000 per gram, cns gram .35 - —
in vegetable oil, 400,000 A units per gram cns gram .004 —
Carvol, bots lb 4.50 6.00
Cascara sagrada bark, bulk lb. .36 - —
Casein dom acid precip., standard, bgs 10,000 lb lots or more, shipt point lb. .32 Nom
premium bgs., 10,000-lb lots or more, shipt. point lb. .38 Nom
Imp., acid-precip., grd., Argentine bgs., c.l., duty paid lb. .22½- .23
New Zealand, duty paid lb. .24 .25
Cashewnut shell liquid, treated, dms, c.l., Newark, N J lb .22 - —
ton lots, same basis lb .23 - —
dm lots same basis lb .25 - —
Cassia, Batavia, "A," bls. lb. .22 - —
"B" lb. .21 - —
"C" lb. .20 - —
Cassia, Corinje, "A" lb. .20½- —
"B" lb. .19½- —
"C" lb. .18 - —
Castor beans, bgs, f.o.b Brazil ton.180.00 Nom.
Oil (see Oil, castor)
Pomace, bgs., c.l., works ton.45.50 - —
Castoreum, nat., cns lb 5.25 -30.00
syn., cns lb 9.00 —
Catechol, CP, cryst., fib dms, works lb 2.17½ —
resub., dms, works lb 4.29½- —
Catnip leaves, Southern bls lb 75 - —
Celery seed, French, bgs lb. .41 - —
Indian, bgs lb. .21 - —
Cellulose acetate, flake, powd, ctns, bgs, 100-lb lots or more, dlvd, E lb. .35 - .46
Acetate-butyrate, powd., 17% butyryl content, bgs., dlvd, E lb. .545 - .555
27% butyryl content, bgs., dlvd E lb .595 .605
38% butyryl content, bgs., dlvd E lb .545 .555
50% butyryl content, bgs., dlvd, E lb. .535 - .595
half-second bgs, dlvd E lb .545 .555
Scrap (see Pyroxylin scrap)
Cerium chloride dms, dlvd lb. .35 —
Hydrate 74% CeO_2, fib dms., 100-lb lots or more lb 1.44 - —
77% CeO_2, fib dms., 100-lb lots or more lb 1.74 - —
Cerium oxalate, NF, bgs., works lb. 1.00 - —
Oxide, optical grade, bgs., 50-lb lots or more, dlvd lb 1.85 1.98
smaller lots, dlvd lb. 2.03 - 2.23
Chalk (see Calcium carbonate)
Chamomile flowers, Hungarian style, cs lb. .85 - .95
Roman, cs. lb. 2.30 - 2.75
Charcoal, activated, NF, fib, dms., c.l., works lb .25 .32
5-ton lots, works lb 26½ .32½
smaller lots works lb 27 .80
Bone (see Black, bone)
Hardwood, bulk, lump, c.l., f.o.b. plant ton.55.00 - —
briquets, bulk, c.l., f.o.b. plant ton 75.00 -80.00
5 lb paper bags, c.l., same basis ton.108.00 —
10 lb paper bags, c.l., same basis ton.95.00 -98.00
25 lb. paper bags, c.l. same basis ton.82.00 -88.00
40 lb. paper bags, c.l., same basis ton.81.00 -85.00
Pinewood, gran., bgs., c.l., works, South ton.57.00 - —
t.c.l., works South ton 57.00 -67.00
lump bgs, c.l., works South ton 53.50 —
t.c.l., works, South ton.56.50 -71.00
bulk, c.l., works, South ton 38.00 —
t.l. works, South ton 41.00 - —
Chestnut extract, Italian, solid, 60% tannin, bgs., exdock, plus duty lb. .09½- —
powd., 70% tannin, bgs., exdock, plus duty lb. .10½- —
Chloral, tech. 94% min. dms., c.l., works lb. .23 - —
t.c.l., works lb. .24 - —
tanks, multiple units, 5 cars, works lb. .21 - —

Chloral hydrate, USP, 1,000-lb. lots, lb. .83 - —
500-lb. lots lb. .88 - —
100-lb lots or less lb. .93 - —
Chloramine T, NF, bbls, works lb .75 1.00
Chlordan, agricultural dms., c.l., frt alld lb. .65 —
t.c.l. 5,000 to 10,000-lb. lots, frt alld lb. .66 —
clarif., dms., c.l., frt alld lb. .69 —
t.c.l. 5,000 to 10,000-lb. lots, frt alld lb. .70 —
Chlorinated paraffin, 42%, dms., c.l., frt alld lb. .16¼ —
t.c.l. same basis lb. .17¼ —
70%, dms., c.l., same basis lb. .18¾- —
t.c.l., same basis lb. .19¾- —
Rubber 5, 10, 20 cps, ctns., c.l., works lb. .55 - —
t.c.l., works lb. .56 - —
125, 1,000 cps., ctns., c.l., works, lb. .65 - —
t.c.l., works lb. .66 - —
Chlorine, liq., cyls., c.l., works, frt. equald lb. .10¼ —
t.c.l. Metropolitan area lb. .11¾ 13
tanks, single units, works, frt. equald 100 lbs. 3.15 —
multiple units, 5 cars, works, frt equald 100 lbs 4.05 - —
3 cars, same basis 100 lbs 4.25 - —
2 cars, same basis 100 lbs. 5.25 - —
1 car, same basis 100 lbs. 7.25 - —
4-Chloro-2-aminotoluene fused bbls. lb 1.45 - —
m-Chloroaniline, dms, min 10,000 lbs or over, frt alld lb. .75 - —
less than 10,000 lbs., same basis lb. .80 - —
tanks, same basis lb. .73 - —
o-Chloroaniline dms, c.l., frt. alld. lb. .65 - —
t.c.l., same basis lb. .67 - —
tanks, same basis lb. .63 - —
p-Chloroaniline dms c.l. frt. alld. lb. .77 - —
t.c.l., same basis lb. .79 - —
o-Chlorobenzaldehyde, dms., t.l., works lb. 1.05 - —
t.t.l., works lb. 1.20 - —
p-Chlorobenzaldehyde, dms., c.l., works lb. 1.95 - —
Chloroform tech, dms, c.l, dlvd, E lb. .18 - —
t.c.l., same basis lb. .19 - —
tanks, same basis lb. .17 - —
USP, dms lb. .30 - —
2-Chloro-4-nitroaniline, paste, dlvd, E., 100% basis lb. .81 —
powd, dlvd E, 100% basis lb. .86 —
4-Chloro-2-nitroaniline powd, dlvd, E lb. .80 - —
o-Chlorophenol dms, c.l, frt, equald, lb. .37 - —
t.c.l., same basis lb. .38 - —
p-Chlorophenol, dms., c.l., frt, equald, lb. .37 - —
t.c.l., same basis lb. .38 - —
Chloropicrin, comi, bots lb. 1.50 - —
cyls., 180 lbs., frt alld lb. .95 - —
100 lbs, same basis lb. .97 - —
25 lbs., same basis lb. 1.22 - —
Choline bitartrate, fib dms., frt, adjusted lb. 1.25 - 1.35
Chloride, fib, dms, frt adjusted, lb. 1.25 - 1.35
Dihydrogen citrate, fib, dms., frt, adjusted lb. 1.25 - 1.35
Chromium acetate, soln, 7½%, bbls., works lb. .09½- —
cbys, works lb. .11¼- —
Fluoride, bbls., works lb .51 - 52
Green (see Green, chrome)
Oxide (see Green chromium oxide)
Trioxide, NF, bots lb. .82 - .89
Yellow (see Yellow chrome)
Cinchona bark, NF, red, broken, bgs lb. .35 - .40
yellow, broken, bgs lb. .35 - .40
Cinnamic aldehyde, dms lb. .95 - 1.25
Cinnamon, Ceylon, No. 2, bgs lb. .96 - —
"0000," bgs., afloat lb. 1.08 - —
Citral, bots., cns lb. 4.90 5.90
Citronellal, bots., dms lb. 2.85 - 3.50
Citronellol, bots., dms. lb. 4.30 - 4.60
Civet, artif, bots lb.13.75 -15.00
nat., bots oz. 13.50 -15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn ton.19.50 - —
crushed, shed moisture, bulk, c.l., Tenn ton.10.00 - —
purif., bgs., c.l., Tenn ton.20.50 - —
imp., airfloated, bgs., c.l., Atl. port, long-ton.42.00 -45.00
lump, bulk Atl. port, long-ton.27.00 -30.20
China, dom., dry-grd., airfloat, 99% 325 mesh, bgs., c.l., Georgia, works ton.10.00 - —
t.c.l., Georgia, works ton.15.50 - —
300 mesh, bgs., c.l., Georgia, works ton.13.50 -14.50
t.c.l., same basis ton.35.00 -36.00
imp., white, lump, bulk, c.l., ex-dock, Phila., Portland, Me., gross ton.20.00 -35.00
powd., bgs., c.l., ex dock net ton.50.00 - —
t.c.l., ex whse net ton.60.00 -65.00
Clove, Madagascar, bgs lb. .42½- —
Zanzibar, bgs lb. .47 - —
CMC, crude, 96%, low or medium, vis., bgs., or fib dms., 23,000 lbs., dlvd, E., 100% basis lb. .39½- .41
less than 23,000 lbs., dlvd, E., 100% basis lb. .41½- .43
65%, low or medium vis., bgs., or fib, dms., c.l., dlvd, E., 100% basis lb. .39½- .41
t.c.l., dlvd E, 100% basis, lb. .41½- .43
purif., high vis. (see Gum Cellulose).
standard, low or medium vis., bgs., 23,000 lbs. or over, works, frt. alld lb. .53 - —
smaller lots, same basis lb. .57 - —

CMC prices W. of the Rockies are 2c. per lb. lower and are on a works basis.

Coaltar, crude, resale for solns., dms., c.l., ex-whse. gal. .30½- —
t.c.l., ex-whse gal. .33½- —
tanks, ex works gal. .17 - —
refd., resale, industrial, dms., c.l., ex-whse. gal. .30½- .35
t.c.l., ex-whse gal. .33½- .39
tanks, works gal. .16½- .20¼
Cobalt acetate, 23.7%, dms., dlvd, lb. 1.20 - —
Carbonate, 46% powd., bgs., dlvd, lb. 1.85 - —
Chloride, 24.2% Co., dms., dlvd, lb. 1.20 - —
Hydrate, 60-61% Co., dms., dlvd, lb. 2.62 - —
Linoleate, fused, 8½% Co., dms. lb. .75¾- —
liq., 6% Co., dms lb. .61 - —
Metal, 97-99%, kgs., ex whse. lb. 2.35 - —
Naphtenate, liq., 6% Co., dms., dlvd lb. .48¼- —
Nitrate, 20.1% Co., bbls., dlvd, lb. 1.00 - —
Oxide, black, 72½-73½% Co., kgs. lb. 1.78 - —
70-71% Co., kgs lb. 1.73 - —



Mathieson
CHLORINE
is there

From Canada to the Gulf, Mathieson Chlorine is available to you in the quantities and quality you specify. Multi-plant facilities assure delivery schedules synchronized with your operating requirements.

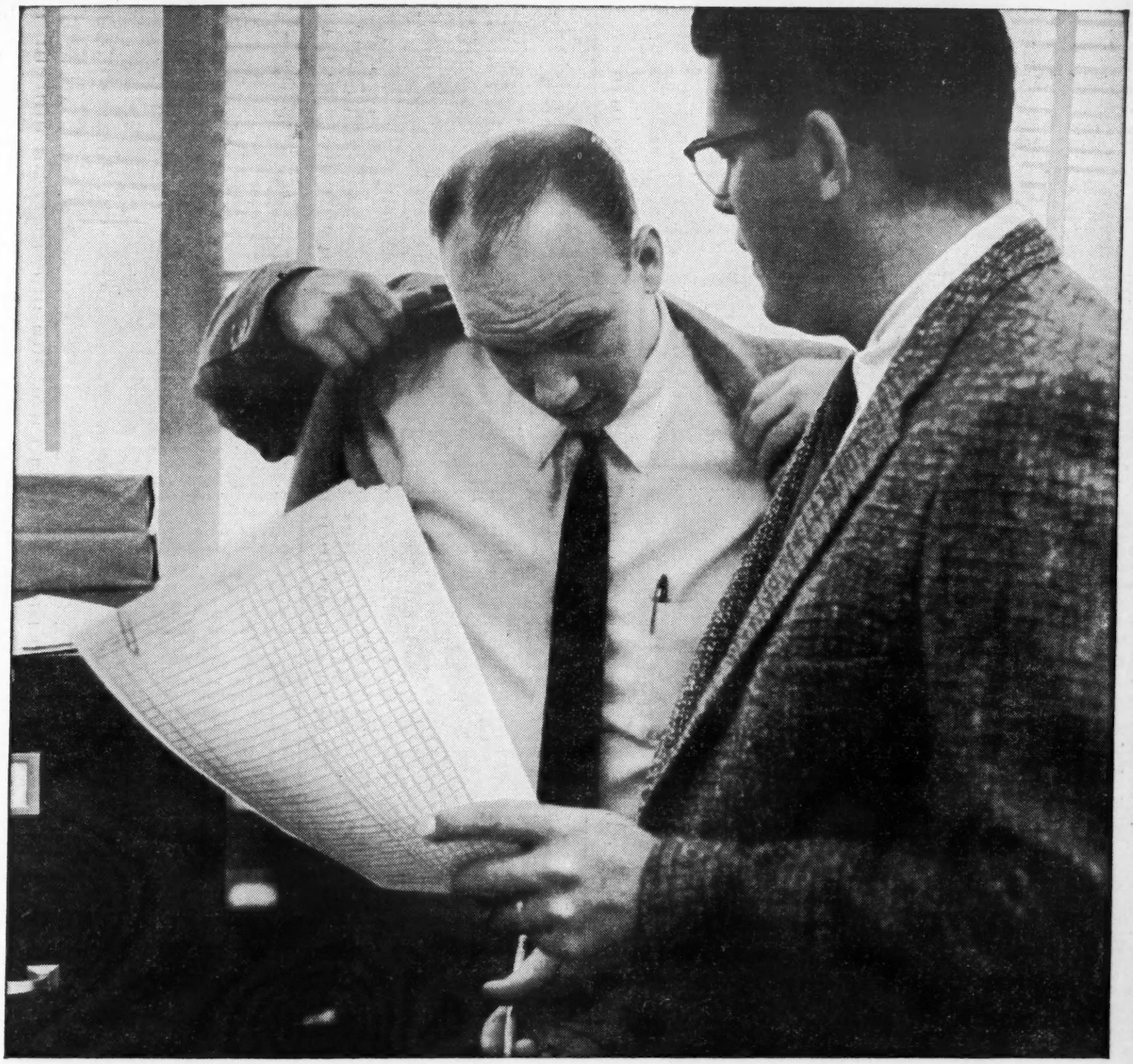
Mathieson Chlorine is shipped in 16-, 30-, and 55-ton single-unit tank cars from Niagara Falls, N. Y., Huntsville, Ala., McIntosh, Ala., Saltville, Va., Arvida, Que.; also 15-ton multi-unit cars from Niagara Falls and Huntsville.

4703

MATHIESON CHEMICALS
OLIN MATHIESON CHEMICAL CORPORATION
INDUSTRIAL CHEMICALS DIVISION • BALTIMORE 3, MD.

MATHIESON

INORGANICS: Ammonia • Bicarbonate of Soda • Carbon Dioxide • Caustic Potash • Caustic Soda • Chlorine • Hydrazine and Derivatives • Hypochlorite Products • Muriatic Acid • Nitrate of Soda • Nitric Acid • Soda Ash • Sodium Chlorite Products • Sulphate of Alumina • Sulphur (Processed) • Sulphuric Acid
ORGANICS: Ethylene Oxide • Ethylene Glycols • Polyethylene Glycols • Glycol Ether Solvents • Ethylene Dichloride • Dichloroethylether • Formaldehyde • Methanol Sodium Methylate • Hexamine • Ethylene Diamine • Polyamines • Ethanolamines • Trichlorophenol • Surfactants



Full time go-getter for good reason

(Dow inside salesman eliminates supply problems . . . through service)

". . . and I've just got to have it by Wednesday," phones the customer. So one of our inside salesmen goes to work.

Our 16% white granulated form of acetylsalicylic acid is requested so that, without further preparation, the aspirin manufacturer can feed it right into his tableting machine. This our salesman notes on the order, then follows through.

The material will be shipped from a stocking terminal nearest the customer. This point may be a thousand and one miles from our inside salesman's office, but he has the answers to eliminate delay . . . to see that the customer gets delivery on time.

That's a promise our inside salesmen make real every day. It's today's vigilance assuring you a good source of supply in the future. THE DOW CHEMICAL COMPANY, Midland, Michigan, Dept. FC 848B.

YOU CAN DEPEND ON DOW

Cobalt phosphate, powd., 32.1% Co., kgs., dlvd lb. 1.69 - —
Resinate, fused, 3% Co., dms., lb. .29¼- —
Sulfate cryst., 21% Co., dms., dlvd lb. .79 - —
monohydrated, 33% Co., dms., dlvd lb. 1.32 - —
Tallate, 6% Co., dms., dlvd lb. 43¾- —
Cocaine, USP, cns. 100-oz. lots oz. 17.80 - —
Hydrochloride, cns., 100-oz. lots, oz. 13.75 - —
Cocillana bark, bls. lb. .25 - —
Cocoa butter, bgs. lb. .66 - .70
Codeine, NF, cns., 100-oz. lots oz. 13.25 - —
Hydrochloride, cns. 100-oz. lots oz. 11.75 - —
Phosphate USP cns. 100-oz. lots oz. 10.25 - —
Sulfate USP, cns. 100-oz. lots oz. 10.75 - —
Codliver oil (see Oil, codliver).
Cohosh root, black, bls lb .20 - .22
blue, bls lb .20 - .22
Colchicine, USP, bots., cns. oz. 29.00 - 35.50
Colchicum root, bls lb. .35 - —
seed, bgs lb. .60 - —
Collodion, USP, dms. lb .32½- —
flexible, dms lb .34 - —
Colocynth, pulp, bls lb. .55 - —
Colombo root, bls lb. .15 - .16
Condurango bark, bales lb. .26 - —
Copaiba balsam, cns., dms lb. .85 - —
Copper acetate, bbls., c.l., works lb. .53 - —
l.c.l., works lb. .54 - —
Carbonate 55% bgs., c.l., works, lb. .35¾- —
l.c.l., works lb. .37¾- —
Chloride, cupric, anhyd., dms., works lb. .45¼- .45¾
cryst., dihydrate dms., works, lb. .30¾- .31¼
dried, dms., works lb. .39 - .39½
cuprous, dms., works lb. .4540- .4890
Cyanide, tech., bbls., 20,000-lb. lots or more lb. .74½- —
1,000-lb. lots or more lb. .75½- —
smaller lots lb. .77½- —
Gluconate, dms lb 3.15 3.35
Hydrate, dms., c.l., frt. alld. E. of Miss lb. .52½- —
l.c.l., same basis lb. .53 - —
Metal, electrolytic, dlvd., Valley basis lb. .36 - —
Naphthenate, liq., 8% Cu, dms., frt. alld lb. .24½- —
Nitrate tech., cryst. bbls. works, lb. .33¼- —
Oleate, solid, 9% Cu., dms., works, lb. .45 - —
Oxide, black, bbls., 100-2,000-lb. lots, works lb. .48½- .50½
red, 97% USN Type I, bbls., 100-5,000 lb. lots lb. .64½- —
90% USN Type II, bbls., 100-5,000 lots or more, works, lb. .62½- —
Oxychloride, dms., c.l., works lb. .53 - —
l.c.l., works lb. .53½- .63½
Quinolinolate, tib, dms lb 4.25 4.50
Resinate, precip., dms., frt. alld, lb. .31½- —
Sulfate, CP, gran., dms., works, lb. .2080- —
cryst., 99%, bgs., c.l., works, 100 lbs. 13.90 - —
l.c.l., same basis 100 lbs. 14.90 - 16.90
monohydrated, 35%, dms., c.l., works 100 lbs. 23.75 - —
l.c.l., works 100 lbs. 24.50 - —
tribasic, dealers, bgs., c.l., works, frt. equald. 100 lbs. 30.00 - —
l.c.l., same basis 100 lbs. 31.00 - 34.00
Undecylenate, dms lb. 2.00 - 3.00
Copra, Atlantic, Gulf ports, c.i.f. ton. 157.00 - —
Pacific ports, c.i.f. lb. 154.00 - —
Coriander seed, Moroccan, bgs lb. .12 - —
Roumanian, bgs lb. 09 - .09½
Yugoslavian bgs lb. .08½- —
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs min 100 lbs. 7.32 - —
l.c.l. 100 lbs. 7.57 - —
Syrup, 42° non-ret. dms., c.l. 100 lbs. 7.30 - —
l.c.l. 100 lbs. 7.45 - —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, NNR bulk gram 3.50 3.55
Cottonseed meal, 41% bgs., Memphis ton. 58.00 - 58.50
Cramp bark, NF, bls lb. .85 - .91
Coumarin, NF, cryst., dms lb. 3.60 - —
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots, chys, lb 3.05 3.26
Coaltar, crude tanks works frt. adjusted gal. .24 - —
soln., 80%, tanks, works gal. .226 - —
refd., dms., c.l., works gal. .42 - .44
l.c.l., same basis gal. .53 - .55
tanks, same basis gal. .33 - .35
Wood, beachwood, cbys., dms lb. 1.60 - 1.65
hardwood, NF, bots, chys lb 1.30 1.35
pinewood, dms., c.l., incl. lb. .0561- —
l.c.l., incl. lb. .0634- —
N Y whse lb. .0745- —
tanks, works lb. .0460- —
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret., dms., c.l., frt equald lb. .1625- —
l.c.l., same basis lb. .1675- —
tanks same basis lb .145 - —
USP, non-ret., dms., c.l., same basis lb. .1775- —
l.c.l., same basis lb. .1825- —
tanks, same basis lb. .160 - —
m-Cresol, 95-98% dms., c.l., works, lb. .60 - —
l.c.l., works lb. .61 - —
m-p-Cresol, 5-95%, 3°C., dms., c.l., frt. equald lb. .1775- —
l.c.l., same basis lb. .1825- —
tanks, same basis lb. .160 - —
m-p-Cresol, 2.97%, 2°C., dms., c.l., frt. equald. lb. .2175- —
l.c.l., same basis lb. .2225- —
tanks, same basis lb .200 - —
o-Cresol, m.p. 30.5° C. and over, ret. dms., c.l., frt. equald lb. .16¾- —
l.c.l., same basis lb. .17¼- —
tanks, same basis lb. .15 - —
30°-30.49° C., ret. dms., c.l., frt. equald lb. .16¼- —
l.c.l., same basis lb. .16¾- —
tanks, same basis lb. .14½- —
29°-29.9° C., ret. dms., c.l., frt. equald lb. .15¾- —
l.c.l., same basis lb. .16¼- —
tanks, same basis lb. .14 - —
o-Cresol, m.p., 25°-28.9°C., dms., c.l., frt. equald lb. .14¾- —
l.c.l., same basis lb. .15¼- —
tanks, same basis lb. .13 - —
p-Cresol, 98% dms., c.l., dlvd lb. .50 - —
l.c.l., dlvd lb. .51 - —
tanks dlvd lb. .49 - —
Methyl ether, cns lb. 1.80 2.05
Crotonaldehyde, 91-93% dms., l.c.l., works lb. .24¼- .25
Cryolite, nat., indust., bgs., c.l., works 100 lbs. 13.00 - —
l.c.l., works 100 lbs. 14.25 - —
Cube root, powd., 5% rotenone, bgs., c.l., t.l., works lb. .29 - —
Cubeb berries, XX, NF, bgs lb. .70 - —
powd., cs lb. .65 - —
Cumene, dms., c.l., works lb. .12 - —
l.c.l., works lb. .14 - —
tanks works lb .11 - —
l.c.l., works lb. .30 - —
Cumin seed, Iranian, bgs lb. .18½- —
Moroccan, bgs lb. .22 - .23
Turkish, bgs. lb. N.P.
Cutch extract 55% tannin, bgs. ex dock, duty extra lb 08½- —
Cyanamide fertilizer mixing grades, 21% N, gran., bgs., Niagara Falls, Ont., contract ton 55.00 - —
pulv. 21% N, bgs., works unit-ton 2.75 - —
Indust. grade, bgs., c.l., works ton. 75.00 - —
l.c.l., works ton. 96.00 - —
6-16 mesh, dms., c.l., works ton 120.00 - —
l.c.l., works ton. 140.00 - —
Cyclohexane 99% tech., dms., c.l., works gal. .70 - —
l.c.l., works gal. .72 - —
tanks, works gal. .55 - —
Cyclohexanol, tech., dms., c.l., works, frt. alld., E lb. .28 - —
l.c.l., works, same basis lb. .29 - —
tanks, works, same basis lb. .24 - —
Cyclohexanone, tech., dms., c.l., works lb .32½- —
l.c.l., works lb. .35 - —
tanks, works lb. .29 - —
Cyclohexene, min. 98% b.r., 82.5°C-85°C, 360-lb dms., c.l., works lb. .55 - —
l.c.l., same basis lb. .60 - —
tanks, same basis lb. .52 - —
Cyclohexylamine, dms., c.l., works, lb. .49 - —
l.c.l., works lb. .50 - —
tanks, works lb. .47 - —
Cyclopropane, CP, 2-lb cyls., works cyl. 48.00 - —
6 oz cyls., works cyl 12.00 - —
USP, hospitals cyls., 40-gal. lots, gal. .38 - —
100 gal. lots gal. .37 - —
200-gal. lots gal. .36 - —

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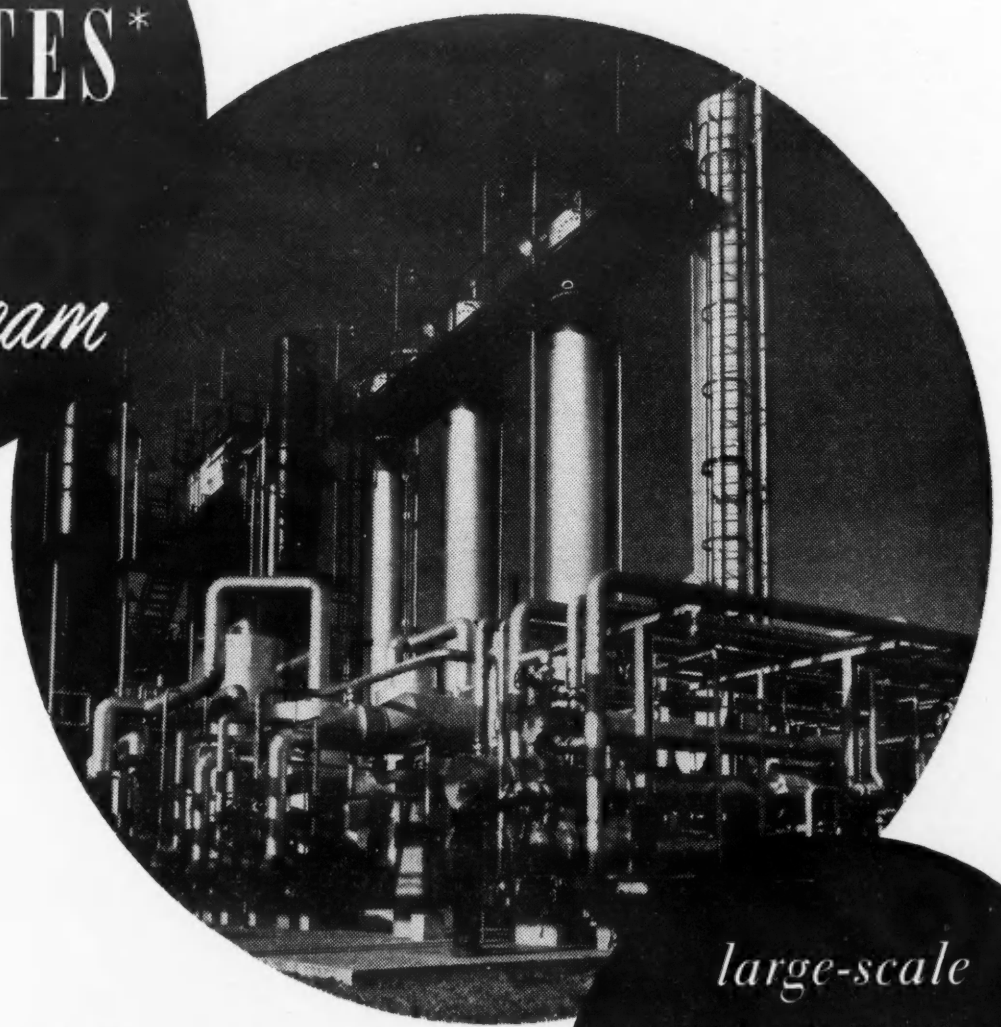
2-4-D, tech., dms., c.l., works, frt. equald lb. .37 - —
l.c.l., same basis lb. .42 - .46
Butyl ester, dms., c.l., works, lb. .40 - —
l.c.l., same basis lb. .45 - .49
tanks, same basis lb. .39 - —
Isopropyl ester, dms., c.l., works, lb. .40 - —
l.c.l., works lb. .45 - .49
tanks, works lb. .39 - —
Dandelion root, bls lb. .32 - —
DDD, tech., flake, grd. fib. dms., c.l., works lb. .45 - —
l.c.l., works lb. .46 - —
DDT powder, bgs., c.l., works, frt. equald lb. .23 - .27
smaller lots, same basis lb. .24 - .28
fib, dms., c.l., same basis lb. .24 - .28
smaller lots, same basis lb. .25 - .29
1-Decanol, tech., dms., c.l., dlvd lb. 41 - —
l.c.l., dlvd lb. .43 - —
tanks, dlvd lb .38½- —
Deertongue leaves, bls lb. .45 - —
Defluorinated phosphate, feed grade, 13% P, paper bgs., c.l., t.l., works ton. 49.50 - —
17%P, paper bgs., c.l., t.l., works ton. 58.00 - —
18% P, paper bgs., c.l., t.l., works ton. 64.10 - —
Prices of defluorinated phosphate in bulk $3 per ton less than bag carlot prices.
Degras, common, bbls lb. .10 - .12
neutral, bbls lb. .21 - .23
d-Desoxyephedrine hydrochloride, bots lb. 24.00 - 25.00
dl, bots lb 6.50 - —
Dextrin, corn, gum, paper bgs., c.l., 100 lbs. 9.33 - —
l.c.l. 100 lbs. 9.48 - —
canary, dark, paper bgs., c.l., 100 lbs. 9.17 - —
l.c.l. 100 lbs. 9.32 - —
light paper bgs., c.l. 100 lbs. 9.07 - —
l.c.l. 100 lbs. 9.22 - —
white paper bgs., c.l. 100 lbs. 8.91 - —
l.c.l. 100 lbs. 9.06 - —
Corn dextrin in cotton bgs. 15c. per 100 lbs. higher.
Potato, imported, bgs lb. .10½- .11
Dextrose, USP, dms lb. .17¾- —
Diacetone (see Alcohol diacetone).
Diacetyl, flavor grade, bots lb. 4.25 - 5.50
Di-sec-amyl phenol, dms., c.l., works lb. .32 - —
l.c.l., works lb. .33 - —
tanks, works lb. .29½- —
Di-tert-amyl phenol, dms., l.c., works lb. .32 - —
l.c.l. works lb. .33 - —
tanks, works lb. .29½- —
o-Dianisidine, fib. dms lb 2.00 - —
Dibenzyl sebacate, dms., c.l., works, lb. .89¾- .90
l.c.l. same basis lb. .90¼- .91
tanks, same basis lb. .88 - —
p-Dibromobenzene, bgs., 500-lb. lots, lb. .55 - —
Dibutyl phthalate, dms., c.l., dlvd, E lb. .32½- —
l.c.l., same basis lb. .33½- —
tanks, same basis lb. .30 - —
Sebacate, dms., c.l., works lb. .66 - —
l.c.l., works lb. .66½- .67
tanks, works, dlvd lb. .64 - .64½
Tartrate, dms, works, frt. alld. lb. .64 - —
Dibutylamine, dms., c.l., dlvd lb. .55½- —
l.c.l., same basis lb. .56½- —
tanks, same basis lb. .53 - —
2,6-Di-tert-butyl-p-cresol, food grade, dms., t.l., c.l., dlvd lb. 1.20 - —
t.t.l., dlvd lb. 1.24 - —
tech., dms., c.l. lb. .91 - —
l.c.l. lb. .95 - —
tanks lb. .86 - —
Dicapryl phthalate, dms., c.l., dlvd., lb. .31 - .32
l.c.l., dlvd lb. .32 - .33
tanks, dlvd lb. .27½- —
Sebacate, dms., c.l., works lb. .63 - —
l.c.l., works lb. .63½- .64
tanks, works lb. .61 - —
2,5-Dichloroaniline, dms., works lb. .83 - —
o-Dichlorobenzene, dms., c.l., frt. alld., E lb. .12¼- —
l.c.l., same basis lb. .13¼- —
tanks, same basis lb. .10¾- —
p-Dichlorobenzene, dms., c.l., f.o.b., works lb. .12 - .14½
l.c.l., same basis lb. .17 - —
1,4-Dichlorobutane, dms., c.l. or t.l., works lb. .33½- —
l.c.l., or t.t.l., works lb. .34 - —
tanks, works lb. .32 - —
Dichlorodiphenyltrichlorothane (see DDT).
Dichloropentanes, dist., dms., c.l., works lb. .05 - —
l.c.l., works lb. .06 - —
tanks, works lb. .03 - —
Dicyclohexylamine, dms., c.l., works, lb. .54 - —
l.c.l., works lb. .55 - —
tanks, works lb. .52 - —
Dicyclohexyl phthalate, fib. dms., c.l., works, frt. alld lb. .58¼- .59
l.c.l., same basis lb. .59¼- .60
Didecyl phthalate, dms., c.l., works, lb. .34 - —
l.c.l., same basis lb. .35 - —
tanks, same basis lb. .31½- —
Dieldrin, dms., frt. alld lb 1.80 - —
l.c.l., frt. alld lb. 1.85 - —
Diethanolamine, dms., c.l., dlvd, E, lb. .27 - —
l.c.l., same basis lb. .28 - —
tanks, same basis lb. .24½- —
Diethyl carbonate, dms., c.l., frt. alld lb. .47 - —
l.c.l., same basis lb. .48 - —
tanks, same basis lb. .45 - —
Ethanolamines, dms., c.l., dlvd. lb. .69½- —
l.c.l., dlvd lb. .70½- —
tanks, dlvd lb .67 - —
Oxalate, dms., c.l., frt. alld lb. .42 - —
l.c.l. same basis lb. .43 - .45
tanks, same basis lb. .40 - —
Phthalate, dms., c.l., dlvd. lb. .30 - .30½
l.c.l., dlvd. lb. .31 - .31½
tanks, dlvd. lb. .27½- .28
Sulfate, dms., c.l., works lb. .19 - —
l.c.l., works lb. .19¾- —
tanks, works lb. .17 - —
Diethylamine, dms., c.l., dlvd, E lb. .51 - —
l.c.l., same basis lb. .52 - —
tanks, same basis lb. .48½- —
N,N-Diethylaniline, dms., c.l., frt. alld lb. .57 - —
l.c.l., same basis lb. .58 - —
tanks, same basis lb. .55 - —
Di-2-ethylhexyl adipate (see Dioctyl adipate).
Diethylene glycol, dms., c.l., dlvd, E, lb. .17¾- —
l.c.l., same basis lb. .18¾- —
tanks, same basis lb. .15¼- —
Boriborate, dms., l.c.l. lb. .31 - —
Diethyl ether, dms., c.l., works, lb. .47½- —
l.c.l., works lb. .48¼- —
Monobutyl ether, dms., c.l., dlvd, E lb. .30¾- —
l.c.l., dlvd, E lb. .31¾- —
tanks, dlvd, E lb. .28¼- —
Acetate, dms., c.l., works, lb. .30¼- —
l.c.l., works lb. .31 - —
tanks, dlvd, E lb. .28¼- —
Monoethyl ether, dms., c.l., dlvd lb. .22½- —
l.c.l., dlvd lb. .23½- —
tanks, dlvd lb. .20 - —
Acetate, dms., c.l., works, lb. .27¼- —
l.c.l., works lb. .28 - —
tanks, dlvd, E lb. .25¼- —
Monomethyl ether, dms., c.l., dlvd lb. .20½- —
l.c.l., dlvd lb. .21½- —
tanks, dlvd lb. .18½- —
Diethylenetriamine, dms., c.l., dlvd, E lb. .44 - —
l.c.l., dlvd, E lb. .45 - —
tanks, dlvd, E lb. .41½- —
Diethylstilbestrol, USP, bots., 10-kilo lots kilo. 100.00 - 147.50
1 kilo lot kilo. 110.00 - 152.50
Digitalis leaves, USP, dom., dms., lb. 1.35 - —
Digitoxin, USP, bots gram. 4.75 - 5.25
Diglycol laurate, dms lb. .32¾- .34
Stearate, dms., ton lots lb. .26 - .28
Dihexyl sebacate, dms., c.l., works, lb. .64 - —
l.c.l., works lb. .64½- .65
tanks, works lb. .62 - —
Dihydrazine sulfate, dms., works, lb. 1.10 - 1.25
Dihydrostreptomycin hydrochloride, bulk gram. .0750- .0775
Sulfate, bulk gram. .0750- .0775
1,2-Dihydroxy anthraquinone, dms., works lb. 2.75 - —
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms lb. 2.55 - —
tech., dms lb. 1.09 - —
Di-isobutyl ketone, dms., c.l., dlvd, lb. .17 - —
l.c.l., dlvd lb. .18 - —
tanks, dlvd lb. .14½- —
Phthalate, dms., c.l., dlvd, E lb. .31½- —
l.c.l., same basis lb. .32½- —
tanks, same basis lb. .29 - —
Di-isobutylene, dms., c.l., dlvd, E lb. .10 - —
l.c.l., dlvd, E lb. .11 - —
tanks, dlvd E lb. .08 - —
Di-iso-octyl phthalate, dms., c.l., dlvd lb. .31 - —
l.c.l., same basis lb. .32 - —
tanks, same basis lb. .28½- —
Sebacate, dms., c.l. works lb. .63½- —
l.c.l., works lb. .64½- —
tanks, works lb. .61 - —
Di-isopropylamine, dms., c.l., dlvd, lb. .23¼- —
l.c.l., same basis lb. .24¼- —
tanks, same basis lb. .20¾- —
Di-isopropylamine, dms., c.l., dlvd, E. of Rockies lb. .50½- —
l.c.l., same basis lb. .51½- —
tanks, same basis lb. .48 - —
Dill seed, dewhiskered, bgs lb. .09¼- —
nat., bgs. lb. .08 - —
Dimethyl anthranilate, cns lb. 4.35 - 5.10
Chloroacetal, dms., c.l., works lb. .45 - —
l.c.l., works lb. .50 - —
tanks, works lb. .40 - —
Ethanolamines, anhyd., dms., c.l., dlvd lb. 1.225 - —
l.c.l., dlvd lb. 1.235 - —
tanks, dlvd. lb. 1.20 - —
70%, dms., c.l., dlvd., 100% basis, contained amines lb. .68½- —
l.c.l., dlvd., 100% basis lb. .69½- —
tanks, dlvd., 100% basis lb. .66 - —
Hydroquinone, dms. lb. 2.20 - 2.25
Phthalate, dms., c.l., works lb. .31 - —
l.c.l., works lb. .32 - —
tanks, works lb. .28½- —
Sebacate, dms., c.l., works lb. 1.275 - —
l.c.l., dlvd lb. 1.285 - —
tanks, works lb. 1.25 - —
Sulfate, 55-gal. ret. dms., c.l., works lb. .15 - —
l.c.l., works lb .16 - —
10-gal. ret. dms., l.c.l., works, lb. .16¼- —
Dimethylamine, 25% soln., dms., c.l., frt. equald lb. .42 - —
l.c.l., frt. equald lb. .42½- —
tanks, frt. equald lb. .33 - —
40% soln, dms, c.l., frt. equald lb. .39 - —
l.c.l. frt. equald lb. .39½- —
tanks, frt. equald lb. .33 - —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. .32 - —
l.c.l., frt. alld lb. .33 - —
tanks, frt. alld lb. .30 - —
N,N-Dimethylformamide, dms., works, lb. .34 - .39
tanks, works lb. .32 - —
2,4-Dinitroaniline, dms., 1,000-lb. lots, same basis, frt. equald lb. .68 - —
smaller lots, frt. equald lb. .71 - —
m-Dinitrobenzene, 85°C., dms lb. .22 - —
89°C., dms lb. .24 - —
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt. alld. E lb. .15¼- —
l.c.l., frt. alld E lb. .15¾- —
tanks, frt. alld E lb. .15 - —
2,4-Dinitrochlorobenzene, crystallizing at 48°C., dms., c.l., frt. alld. E lb. .20¼- —
l.c.l., frt. alld. E lb. .20¾- —
tanks, frt. alld. E lb. .20 - —
2,4-Dinitrophenol, bbls lb. .37 - —
2,4-Dinitrotoluene, oily, dms lb. .11 - —
refd., 63°C., dms lb. .23 - —
Dioctyl adipate, dms., c.l., works, lb. .42½- —
l.c.l., works lb. .43½- —
tanks, works lb. .40 - —
Phthalate, dms., c.l., frt. alld. lb. .30½- .31
l.c.l., frt. alld lb. .31½- .32
tanks, frt. alld lb. .28 - .28½
Sebacate, dms., c.l., works lb. .60½- —
l.c.l., works lb. .61½- .62½
tanks, works, dlvd lb. .58 - .58½
1,4-Dioxane, dms., c.l., works lb. .28¾- —
l.c.l., same basis lb. .29¼- —
tanks, same basis lb. .27 - —
Dip oil (see Tar acid oil).
Dipentaerythritol, bgs., l.c.l., works, lb. .35 - —
Dipentene, dest-dist., dms., c.l., works gal. .47 - —
l.c.l., works gal. .52 - —
ex-whse gal. .62 - —
steam-dist., dms., c.l., works, South gal. .59 - —
dlvd, N. Y gal. .67 - —
tanks, works, South gal. .45 - —
Diphenyl, bbls., c.l., works lb. .15 - —
l.c.l., works lb. .16 - —
Diphenyl in bags ¼c. lower
Oxide, perfume grade, cns lb. .56 - .61
Phthalate, dms., c.l., works lb. .51¾- —
l.c.l., works lb. .53¾- —
Diphenylamine, refd., flake, bgs., c.l., works, frt. equald lb. .33 - —
l.c.l., works, frt. equald lb. .35 - —
fused, tanks, works, frt equald, lb. .31 - —
tech., fused, tanks, works, frt. equald lb. .30 - —
Diphenylguanidine, bgs., dms., ton lots, frt. alld lb. .52 - —
smaller lots, frt. alld. lb. .53 - —
Diphenylhydantoin-sodium USP, dms lb 5.00 5.60
Dipropylene glycol, dms., c.l., frt. alld. lb. .17¾- —
l.c.l., same basis lb. .18¾- —
tanks, same basis lb. .15¼- —
Monomethyl ether, dms., c.l., dlvd, E lb. .20 - —
l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½- —
Di-o-tolylguanidine, dms., ton lots, frt. alld lb. .62 - —
smaller lots, frt. alld lb. .63 - —
Divi-divi, 45% tannin, bgs., bls., c.l., U. S. ports, exdock ton. 80.00 - —
Divinylbenzene, 20-25%, dms., c.l., works, frt equald lb. .20 - —
l.c.l., same basis lb. .21 - —
tanks, same basis lb. .19 - —
50-60%, dms., c.l., works, 100% basis lb. 1.00 - —
l.c.l., works, 100% basis lb. 1.05 - —
Dodecylbenzene, dms., c.l., frt. alld lb. .14 - —
l.c.l., same basis lb. .15 - —
tanks, same basis lb. .12 - —
Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb. lots, dlvd:—
Blue, FD & C, No. 1 lb. 15.65 - 17.60
No. 2 lb. 15.65 - 17.60
Green, FD & C, No. 1 lb. 15.65 - 17.60
No. 2 lb. 19.60 - 22.85
No. 3 lb. 21.30 - 35.90
Red, FD & C, No. 1, cns lb 5.90 7.85
No. 2 lb 3.30 4.10
No. 3 lb 19.60 - 22.85
No. 4 lb 5.55 7.50
Violet, FD & C, No. 1, cns lb. 15.65 - 17.60
Yellow, FD & C, No. 1, cns lb 9.15 - 11.05
No. 5 lb 3.30 4.10
No. 6 lb 3.30 4.10
Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb lots, dlvd:—
Black, D&C, No. 1 lb. 10.50 - 10.95
Brown, D&C, No. 1 lb. 15.65 16.10
Green, D&C, No. 5 lb. 15.65 - 16.10
No. 6 lb. 15.65 - 16.10
No. 7 lb. 14.35 - 14.80
Dyes, coaltar, certified colors for drugs and cosmetics, 1-lb. lots, works, 25-50 lb lots, dlvd:—
Orange, D&C, No. 3 lb. 10.50 - 10.95
No. 4 lb. 19.60 - 20.05
No. 5 lb 5.25 5.70
Red, D&C, No. 17 lb. 10.50 - 10.95
No. 18 lb. 23.55 - 24.00
No. 19 lb. 15.60 - 15.45
No. 21 lb 3.10 3.60
No. 22 lb. 10.50 - 10.95
No. 28 lb. 24.20 - 24.65
No. 33 lb. 17.00 - 17.45
Violet, D&C, No. 2 lb. 15.65 - 16.10
Yellow, D&C, No. 7 lb. 10.50 - 10.95
No. 8 lb. 10.50 - 10.95
No. 10 lb. 13.05 - 13.50
No. 11 lb. 13.05 - 13.50
Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb. and 1-lb. lots dlvd.:—
Blue, Ext., D&C, No. 1, cns lb. 15.65 - 16.10
Green, Ext., D&C, No. 1, cns lb. 15.65 - 16.10
Red, Ext., D&C, No. 1, cns lb. 13.05 - 13.50
Yellow, Ext., D&C, No. 1, cns lb. 10.50 - 10.95
Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype) contract, dlvd, No.
20 Chrysoidine Y, dustless lb .89 - —
27 Fast light, orange 2G lb. 1.29 - —
31 Phloxine 2G lb. 1.05 - —
36 Yellow 2G lb. 1.18 - —
40 Orange R, extra, conc lb. 1.52 - —
57 Fuchsine 6B lb. 1.55 - —
79 Scarlet 2R lb. 1.16 - —
151 Orange AD lb. .79 - —
161 Orange RR lb. .94 - —
176 Fast red A lb. 1.39 - —
179 Rubine XX, conc lb. 1.48 - —
180 Blue F4B lb. 1.31 - —
185 Brilliant scarlet 3RN, conc. lb. 1.20 - —
202 Chrome blue black R, conc. lb. 1.07 - —
203 Chrome black T lb. .94 - —
208 Fast blue SR lb. 1.30 - —
216 Chrome red B lb. 1.09 - —
234 Brown Y lb. 1.27 - —
246 Blue black, extra, conc lb. 1.37 - —
275 Milling red 3R, conc lb. 1.91 - —
289 Navy blue 3R, conc lb. 1.70 - —
299 Black F, conc lb. 2.19 - —
304 Neutral black 2B, conc. lb. 2.61 - —
326 Fast scarlet 4BNC lb. 2.12 - —
332 Bismark brown RX, conc., dustless lb. 1.37 - —
365 Brilliant yellow, conc lb. 3.67 - —
382 Scarlet B lb. 2.60 - —
401 Diazo black BHD lb. .93 - —

New National NACCONATES* (DIISOCYANATES) Plant

Now on stream



large-scale output assures ample raw materials for mass-produced urethanes

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ALLIED CHEMICAL & DYE CORPORATION
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Akron Atlanta Boston Charlotte Chattanooga Chicago Columbus, Ga. Greensboro Los Angeles New Orleans Philadelphia Portland, Ore. Providence Richmond San Francisco Toronto

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☐ Without obligation, send me NACCONATES Product Data Package—6 technical bulletins on diisocyanates.

☐ Have representative call by appointment.

NAME_____

POSITION_____

COMPANY_____

ADDRESS_____

I-7

Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd No

406 Blue 2B, extra cone.....lb. 1.53 • —
419 Red FC.....lb. 1.45 • —
420 Brown M.....lb. 1.40 • —
448 Red 4BX, conc.....lb. 1.69 • —
518 Diamine sky blue FF, extra, conc..lb. 1.95 • —
561 Brown B.....lb. 2.89 • —
581 Black EB, 200%.....lb. 1.13 • —
593 Green BY, conc.....lb. 1.03 • —
596 Yellow brown K, extra..lb. 1.26 • —
620 Yellow 2G.....lb. 1.31 • —
639 Fast Yellow GG.....lb. 2.32 • —
640 Yellow XX.....lb. 2.30 • —
655 Yellow OX.....lb. 2.64 • —
657 Green V.....lb. 2.73 • —
662 Brilliant green G.....lb. 3.62 • —
667 Milling green 6B, conc....lb. 4.78 • —
671 Blue EG.....lb. 1.98 • —
681 Crystal violet powder....lb. 2.15 • —
696 Violet 6BN powder.....lb. 2.25 • —
720 Brilliant blue BBG.....lb. 2.44 • —
729 Blue B, extra conc.....lb. 3.61 • —
749 Red BX.....lb. 5.62 • —
800 Chinoline yellow ZSS.....lb. 2.67 • —
814 Yellow NN, conc.....lb. 3.67 • —
841 Safranine GF, extra, conc. lb. 4.11 • —
860 Induline base ZM.....lb. 1.07 • —
865 Nigrosine J.....lb. 4.76 • —
922 Blue GXX.....lb. 2.22 • —
978 Black GXCF, conc.....lb. .38 • —
1034 Alizarine red SC.....lb. 2.85 • —

Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd. No.

1054 Alizarine blue SAPX.....lb. 3.78 • —
1078 Alizarine green CG, extra. lb. 3.53 • —
1085 Alizarine blue black B..lb. 3.02 • —
1096 Golden orange GFD, single paste..lb. 2.58 • —
1099 Dark blue BO, single paste. lb. 2.28 • —
1101 Jade green N supra double paste lb. 1.10 • —
1106 Blue RS, double paste..lb. 3.85 • —
1113 Blue, BLFD, double paste.lb. 2.93 • —
1150 Olive R, single paste....lb. 1.42 • —
1151 Brown R, single paste....lb. 2.29 • —
1171 Indigo synthetic, 20% paste. lb. .31 • —
1217 Orange RD, double powder. lb. 4.60 • —
p-4 Brown PG.....lb. 3.00 • —
p-14 Brown EB.....lb. 2.16 • —
p-24 Gray L.....lb. 2.08 • —
p-80 Diazo brilliant scarlet ROAD lb. 3.62 • —
p-202 Diazo black VJ, conc....lb. 2.48 • —
p-244 Brilliant scarlet BN.....lb. 1.70 • —
p-313 Naphthol SWF.....lb 2.24 • —

Dyes, coaltar, oil-soluble, 100-lb. drums., dlvd.

24 Oil orange Z-7078.....lb 1.06 • —
73 Oil scarlet BL.....lb. 1.70 • —
1073 Oil violet ZIRS.....lb. 6.81 • —
1078 Alizarine cyanine green base Z lb. 6.13 • —

Dyes, coaltar, oil-soluble, 100-lb. dms., dlvd.

1080 Oil violet special Z.....lb. 6.81 • —
Oil black ZBC.....lb. 4.46 • —
Oil black ZBD.....lb. 3.03 • —
Oil black ZHH.....lb. 4.61 • —
Oil black ZMM.....lb. 6.52 • —
Oil blue ZN.....lb. 8.02 • —
Oil blue ZV.....lb. 4.95 • —
Oil orange ZMG.....lb. 1.32 • —
Oil red Z-1700.....lb. 1.49 • —
Oil yellow ZG, cone.....lb. 6.33 • —

Dyes, coaltar, spirit soluble, 100 lb. dms., dlvd.

p-317 Spirit yellow ZR.....lb. 4.62 • —
p-520 Spirit orange ZR, conc...lb. 5.87 • —
Spirit black ZRB.....lb. 2.95 • —
Spirit brown ZG.....lb. 5.30 • —
Spirit red ZB, cone.....lb. 6.41 • —

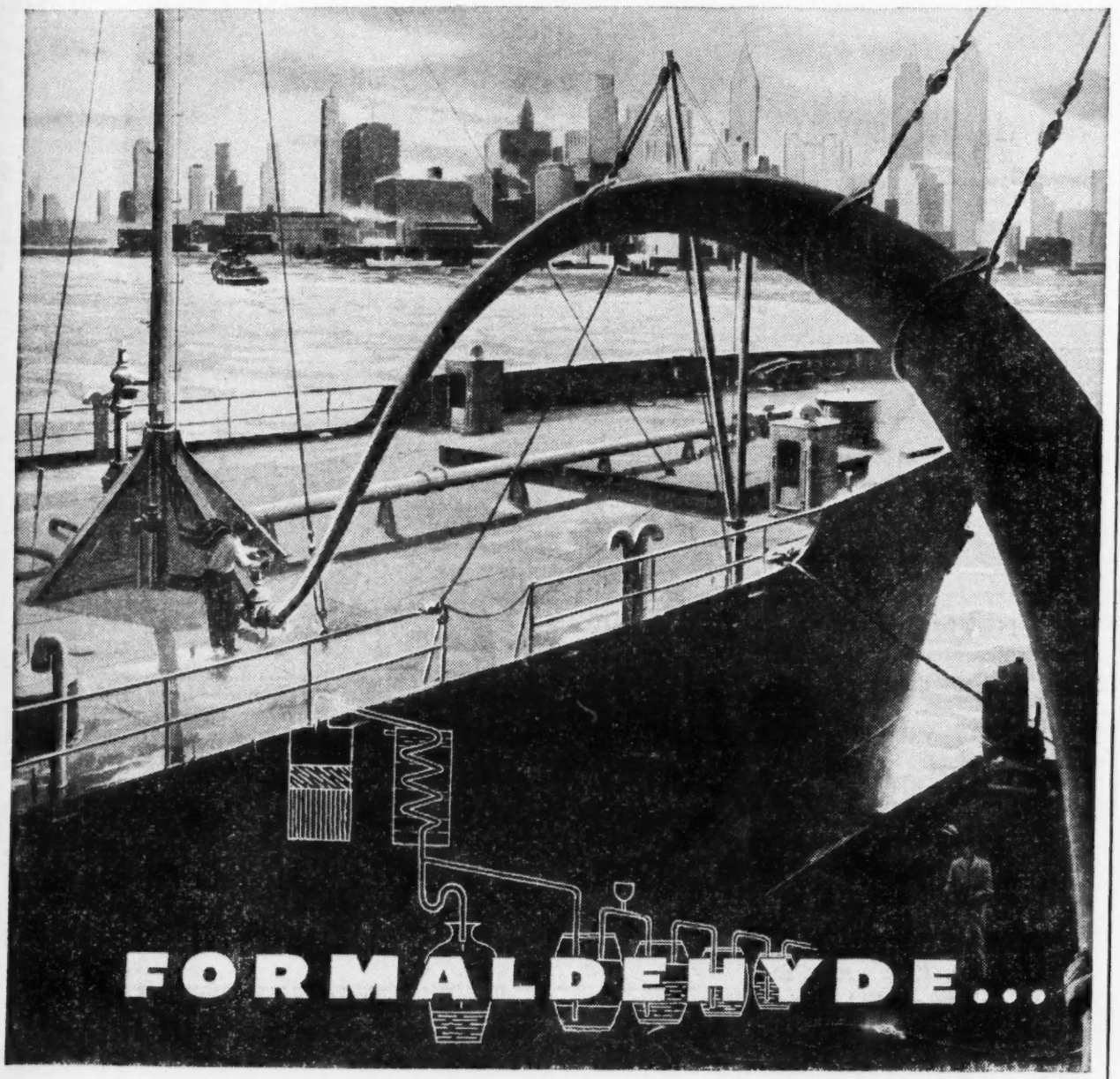
E

Echinacea root, bls.....lb. 1.10 • —
Egg albumin (see Albumin).
Yolk, dried, dom., bbls.....lb. 1.05 • 1.07
tanners, bbls.....lb. .06 • .06½
Elm bark, grinding, bls.....lb. .30 • .32
powd., bbls., bxs.....lb. .45 • —
select, bundles.....lb. .75 • —
Emetine hydrochloride, USP, bots oz.48.25 -49.00
Endrin, tech., dms., dlvd., 100% basis lb. 3.75 • —
Ephedrine, syn., USP, anhyd., bots, 100-oz. lots oz. .93 • 1.00
hydrous bots, 100-oz lots oz. .92 • —
Hydrochloride, tins, 100-oz. lots. oz. .65 • .75
Sulfate, cryst., tins, 100-oz. lots. oz. .65 • .72
powd., tins, 100-oz. lots....oz. .65 • .73
Epichlorohydrin, dms., c.l., dlvd lb. .35 • —
l.c.l., dlvd.....lb. .36 • —
tanks, dlvd.....lb. .33 • —

l-Epinephrine, base, syn., USP, bots., 100 gram lots..gram. .80 • —
Epsom salt (see Magnesium sulfate).
Ergot, NF, dms., tin-lined.....lb. 2.00 • —
Eserine salicylate, bots.....oz.72.50 -84.00
Sulfate, bots.....oz.87.75 • —
Ether (see specific product).
Ethyl acetate, nat., ferment., 85-88%, dms., c.l., frt. alld..lb. .14½- —
l.c.l., frt. alld.....lb. .15½- —
tanks, frt. alld.....lb. .12 • —
95-98%, dms., c.l., frt. alld. lb. .14¾- —
l.c.l., frt. alld.....lb. .15¾- —
tanks, frt. alld.....lb. .12¼- —
99%, dms., c.l., frt. alld..lb. .15 • —
l.c.l., frt. alld.....lb. .16 • —
tanks, frt. alld.....lb. .12½- —
syn., 85-88%, dms., c.l., dlvd. lb. .14½- —
l.c.l., dlvd.....lb. .15½- —
tanks, dlvd.....lb. .12 • —
95-98%, dms., c.l., dlvd....lb. .14¾- —
l.c.l. dlvd.....lb. .15¾- —
tanks, dlvd.....lb. .12¼- —
99%, dms., c.l., dlvd.....lb. .15 • —
l.c.l., dlvd.....lb. .16 • —
tanks, dlvd.....lb. .12½- —
Acetoacetate, dms., c.l., dlvd..lb. .58½- —
lb. .59½- —
l.c.l., dlvd.....lb. .59½- —
tanks, dlvd.....lb. .56 • —
Acrylate, dms., c.l., t.l., dlvd. lb. .36 • —
t.l., dlvd.....lb. .37 • —
tanks, dlvd.....lb. .34 • —
Aminobenzoate, USP (see Benzocaine)
Amyl keytone, dms., c.l., dlvd lb. .20 • —
Amyl ketone, dms. c.l., dlvd lb. .20 • —
l.c.l., same basis.....lb. .21 • —
tanks, same basis.....lb. .17½- —
Benzoate, bots.....lb. .74 • .90
Bromide, tech., 98%, dms., c.l., frt. alld. E lb. .42 • .44
l.c.l., frt. alld. E.....lb. .44 • .46
Butyl ketone, dms., c.l., works. lb. .36 • —
l.c.l., works.....lb. .36¾- —
tanks, works.....lb. .34 • —
Butyrate, works.....lb. .85 • .90
Carbamate (see Urethane).
Cellulose, vis. 7 cps., bgs., 5,000-lb. lots or more, works lb. .70 • —
smaller lots, works lb. .72 • .80
vis. 10, 20, 50, 100, 150 cps., bgs., 2,000-lb. lots or more, works lb. .65 • .70
smaller lots, works....lb. .67 • .81
Chloride, tech., cyl., works..... .20 • .22
dms., works.....lb. .18 • .20
tanks, works.....lb. .10 • —
Cinnamate, cns.....lb. 3.35 • 3.45
Ether, absolute, ACS, dms.....lb. .27 • —
anesthesia, USP, hospitals, 1-lb. cns lb. 1.01 • —
½-lb. cns.....lb. 1.11 • —
¼-lb. cns.....lb. 1.21 • —
Indust., dms., c.l., dlvd.....lb. .12½- —
l.c.l., dlvd. E.....lb. .13½- —
tanks, dlvd. E.....lb. .10 • —
Gallate, dms., 100 to 2,000-lb. lots lb. 3.90 • 4.40
Iodide, cbys., works.....lb. 3.30 • —
Methacrylate, dms., c.l., and less than truckload, works, frt. equald lb .51½- .52
Morphine hydrochloride, USP, bots. oz.11.85 • —
Nitrite (see Nitrous ether).
Oenanthate, dms.....lb. 1.00 • 1.50
Oleate, dms., l.c.l., works.....lb. No prices.
Oxalate (see Diethyl oxalate).
Silicate dist. (see Tetraethyl orthosilicate).
40% available SiO_2, dms., c.l., dlvd..lb. .44½- —
l.c.l., dlvd.....lb. .45½- —
tanks, dlvd.....lb. .42 • —
Ethylethanolamines, mixed, dms., c.l., dlvd. E lb. .43½- —
l.c.l., dlvd E.....lb. .44½- —
tanks, dlvd. E.....lb. .41½- —
N-Ethyl-a-naphthylam'ne, dms., works, lb. 1.02 • —
N-Ethyl-o-toluidide, bbls.....lb. .88 • —
Ethylamine (see Mono, Di- or Tri-)
N-Ethylaniline, dms. c.l., frt. alld. lb. .57 • —
l.c.l., frt. alld.....lb. .58 • —
tanks, frt. alld.....lb. .55 • —
Ethylbenzene, 99% dms., c.l., or t.l., frt. equald lb. .17 • —
t.t.l. same basis.....lb. .18 • —
tanks, same basis.....lb. .15 • —
Ethylene dichloride, dms. c.l., dlvd. lb. .11½- —
l.c.l., same basis.....lb. .12½- —
tanks, same basis.....lb. .09 • —
Ethylene dichloride prices W. of Rockies, 1c. per lb. higher.
Glycol, indust., dms., c.l., dlvd. E lb. .16 • —
l.c.l., same basis.....lb. .17 • —
tanks, same basis.....lb. .13½- —
Monobutyl ether, dms., c.l., dlvd. E lb. .22 • —
l.c.l., dlvd E.....lb. .23 • —
tanks, dlvd. E.....lb. .19½- —
Monoethyl ether, dms., c.l., dlvd. E lb. .21 • —
l.c.l. dlvd. E.....lb. .22 • —
tanks, dlvd. E.....lb. .18½- —
Acetate, dms., l.c., dlvd E. lb. .19½- —
l.c.l., dlvd. E.....lb. .20½- —
tanks, dlvd. E.....lb. .17 • —
Monomethyl ether, dms., c.l., dlvd. E lb. .21 • —
l.c.l., dlvd. E.....lb. .22 • —
tanks, dlvd. E.....lb. .18½- —
Acetate, dms., l.c., dlvd. E. lb. .29 • —
l.c.l., dlvd. E.....lb. .29¾- —
tanks, dlvd. E.....lb. .27 • —
Monostearate, triple pressed, dms lb. .33 • .35
Oxide, dms., c.l., dlvd E.....lb. .21½- —
l.c.l. dlvd. E.....lb. .24½- —
tanks, dlvd. E.....lb. .15½- —
Trichloride (see Trichloroethane).
Ethylenediam'ne, 85-88%, dms., c.l., dlvd. E., 100% basis..lb. .42 • —
l.c.l., dlvd. E., 100% basis..lb. .43 • —
tanks, dlvd. E., 100% basis..lb. .40 • —
Ethylvanillin, cns., 25-lb. lots...lb. 6.20 • 6.25
Eucalyptol, USP, cns., dms.....lb. 1.25 • 1.40
Eugenol, USP, bots.....lb. 2.25 • 2.60
Euphorbia herb, bls.....lb. .15 • .17

F

Feldspar, 140-200 mesh, bulk, c.l., works ton.15.50 • —
Feldspar in bags $3 per ton higher
Fennel seed, Argentine, bgs.....lb. .13½- —
Czech, medium, bgs.....lb. .09 • —
Indian, light, bgs.....lb. .15½- —
Roumanian, bgs.....lb. .09 • —
Fenugreek seed, Indian, bgs.....lb. .08½- .09
Moroccan, bgs.....lb. .09½- .09
Ferric acetate liquor, 28°, bbls., c.l., works lb. .09 • —
l.c.l., works.....lb. .09¾- —
soln., USP IX, cbys.....lb. .16 • —
djns.....lb. .17 • —



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The first production of Formaldehyde in 1889 by Merchlin and Lösekann was measured in a handful of kilograms and carefully doled out to laboratories and manufacturers. Today, Celanese alone regularly delivers millions of gallons of this workhorse chemical by tanker, barge, highway and rail.

And today's Formaldehyde . . . the Formaldehyde developed by progressive Celanese research . . . is a specialized chemical produced in a variety of concentrations to meet specific process requirements, to help speed and improve the manufacture of thousands of products. Celanese, one of the world's largest producers of Formaldehyde, now supplies: Formalin (37%), Paraformaldehyde (flake-91%), Formcel Solution (Formaldehyde in specified alcohols) and Trioxane (anhydrous trimer).

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Functional Fluids, Gasoline Additives, Glycols, Ketones, Oxides
Polyols, Plasticizers, Salts, Solvents, Vinyl Monomers

Celanese CHEMICALS

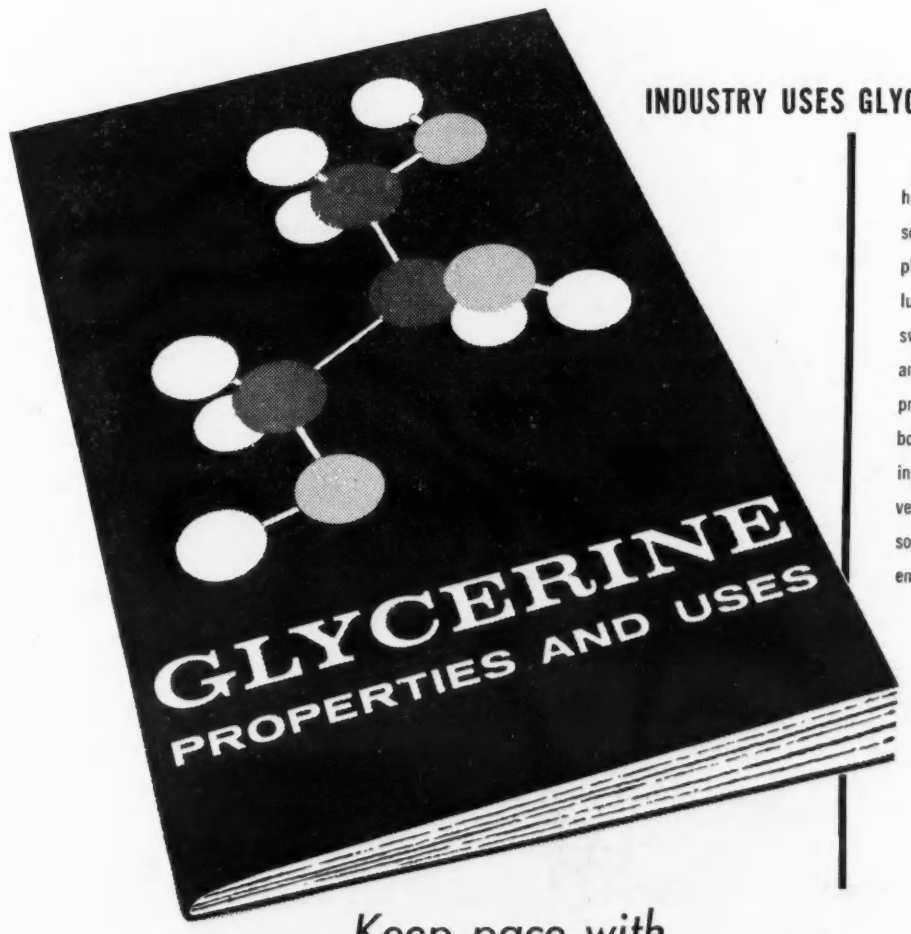
.....for improved products

Agricultural, automotive, aviation, building, electrical, paper, pharmaceutical, plastics, surface coatings, textile.

Ferric cacodylate, NF, bots....lb. 13.00 -14.00
Chloride, anhyd., tech., dms., c.l., works 100 lbs. 7.00 - —
l.c.l., works 100 lbs. 7.85 - —
indust., cryst. bbls., c.l., works 100 lbs. 5.23 - 6.75
l.c.l., works 100 lbs. 5.75 7.25
42° Be. photo grade, cbys., c.l., works 100 lbs. 7.25 8.25
sewage grade, tanks, frt. equald 100% basis, 100 lbs. 3.50 - —
USP cryst dms. works lb .07½ .09
Citrate, gran., dms.....lb. .86 - —
Hypophosphite, NF dms lb. 3.45 —
Naphthenate, liq. 6% Fe, dms., frt. alld lb. .25¾ - —
Oxalate gran dms lb. .85 .87
Oxides (see oxides under Black, Brown, Red, and Yellow)
Phosphate NF soluble, gran., pearls cs lb .64 .65
Pyrophosphate, NF VII, soluble, powd., gran., pearls, dms., 10,000 lb lots lb. 40½ —
Resinate 6¾% Fe dms., frt alld. lb. .29½ - —
Stearate, dms., c.l., frt. alld lb. .39 - —
l.c.l., frt. alld.....lb. .40 - .44
Sulfate partially hydrated, bgs., c.l., works ton.31.75 -33.75
c.l., works ton.34.75 40.75
lb .37 —
Ferric-ammonium citrate, brown, pearls, NF, gran., dms lb. .65 - .68
green pearls, USP XII, gran., dms lb. .66 - .69
Oxalate fine gran. dms lb .25½ .28½
Ferric-potassium oxalate fine gran., dms lb. .30½ - .33½
Ferric-sodium oxalate, fine gran., dms lb. .25½ - .28½
Ferrous gluconate, NF dms lb .94 - —
Sulfate, gran. bgs., c.l. works ton.34.50 —
l.c.l. dlvd Metropolitan area 100 lbs 3.35 4.25
bbls. c.l., works ton 40.00 —
bulk, c.l., works ton 27.00 —
USP cryst., bbls., dms lb .09½ - .10
Fir balsam Canada, cns gal.32.00 - —
Oregon, bbls gal. 4.50 - —
Fishliver oil (see Oil fishliver)
Fishmeal, dom., menhaden, 60% protein grd. bgs., Chesapeake Bay area ton.140.00 - —
scrap, same basis ton.136.00 - —
Fleaseed (see Psyllium seed)
Formaldehyde, 37%, (inhibited, 7 to 8% methanol), USP, dms., c.l., dlvd lb. .0715- —
tanks, dlvd.....lb. .0450- —
(12 to 15% methanol), USP, dms., c.l., dlvd lb. .0740- —
tanks, dlvd.....lb. .0475- —
(uninhibited, methanol-free), tanks, dlvd lb. .0420- —
Fringetree bark, bls lb .60 .61
Fullers earth, bgs, c.l. Ill. mines, ton.19.00 - —
powd., insecticide grade, dried, bgs. c.l. Ga. or Fla. mines ton.17.50 - —
calcined bgs. c.l., same basis ton.20.00 -21.75
oil-bleaching grade, 100-mesh, bgs., c.l., same basis ton.16.30 -17.00
200-mesh bgs. c.l., same basis ton.17.50 -18.00
spent bgs c.l. shipt point ton 4.50 5.00
Furfural dms. c.l., works lb .13 - —
l.c.l. works lb .14 - —
tanks, dlvd E lb .12 - —
dlvd W lb .13 - —
Fusel oil, refd., dms., c.l. dlvd lb. .18 - —
l.c.l. dlvd lb. .19 - —
tanks, dlvd lb. .15½ - —
Fustic extract, cryst., No. 1, bbls., l.c.l lb. .47½ - —
No. 2 bbls. l.c.l lb. .45½ - —
No. 3, bbls., l.c.l lb. .43½ - —
liq., No. 1, bbls., l.c.l lb. .22½ - —
No. 2 bbls. l.c.l lb. .21½ - —
No. 3, bbls. l.c.l lb. .19 - —
solid No. 1 bxs. l.c.l lb. .45 - —

G

G salt, bbls., frt. alld, 100% basis lb. .73 - —
Gammapicoline (see g-Picoline)
Gelatin, edible, pure (pork skin), 75 Bloom test, bbls., c.l lb. .53 - —
150 Bloom test, bbl., c.l lb. .64 - —
200 Bloom test, bbls., c.l lb. .70 - —
225 Bloom test, bbls., c.l lb. .73 - —
275 Bloom test, bbl., c.l lb. .81 - —
Gelsemium root, bls lb. .26 - —
Gentian root, bls. lb. .23 - —
grd., bbls., bxs lb. .27 - —
powd., bbls., bxs lb. .27 - —
Geraniol, extra, cns., dms. lb. 3.95 - —
standard, cns., dms. lb. 3.75 - —
Geranyl acetate, cns. lb. 3.95 - —
Ginger oleoresin NF from African root, bots lb 4.00 - 7.75
from Jamaican root, bots lb 6.00 -10.25
Root, African, bls. lb. .33 - —
Cochin, bgs lb. .26½ - —
Jamaican, No. 2, bgs lb. .76 - —
No. 3 bgs. lb. .75 - —
Nigerian, split, bgs. lb. .28 - —
Glauber's salt, anhyd (see Sodium sulfate)
Glue, bone, extracted, dry bone, 86 jellygrams, bgs., c.l., dlvd lb. .15 - —
104 jellygrams, same basis lb. .17 - —
131 jellygrams, same basis lb. .18 - —
164 jellygrams, same basis lb. .20½ - —
191 jellygrams, same basis lb. .21 - —
222 jellygrams, same basis lb. .22 - —
12 green 40 jellygrams, ogs., c.l., dlvd lb. .13½ - —
65 jellygrams, same basis lb. .13¾ - —
86 jellygrams, same basis lb. .14 - —
115 jellygrams, same basis lb. .14½ - —
135 jellygrams, same basis lb. .15 - —
164 jellygrams, same basis lb. .16 - —
180 jellygrams, same basis lb. .17 - —
200 jellygrams, same basis lb. .18½ - —
Bone glue, l.c.l. prices 1c. higher.
Hide, 70-94 jellygrams, bgs., c.l., dlvd lb. .13 - —
95-121 bgs. c.l. dlvd lb. .16 - —
122-149, bgs., c.l., dlvd.....lb. .18½ - —
150-177, bgs., c.l., dlvd.....lb. .21 - —
178-206, bgs., c.l., dlvd.....lb. .23½ - —
207-236, bgs., c.l., dlvd.....lb. .26 - —
237-266, bgs., c.l., dlvd.....lb. .28 - —
267-298, bgs., c.l., dlvd.....lb. .30 - —
299-330, bgs., c.l., dlvd.....lb. .32 - —
331-362 bgs. c.l., dlvd.....lb. .34 - —
363-394, bgs., c.l., dlvd.....lb. .36 - —
395-427, bgs., c.l., dlvd.....lb. .38 - —
428-460, bgs., c.l., dlvd.....lb. .40 - —
461-494, bgs., c.l., dlvd.....lb. .42 - —
495-529, bgs., c.l., dlvd.....lb. .43 - —
Hide glue l.c.l. prices 1c. higher.
l-Glutamine, bots. gram. .65 - —
Glycerine, nat., crude, saponification, 88%, to refineries, tanks...lb. .16½ - —
soaplye, 80%, tanks.....lb. .15 - —
refd., CP, USP 99%, dms., c.l., dlvd lb. .29¾ - —
l.c.l., dlvd.....lb. .29¾ - —
tanks, dlvd.....lb. .27¾ - —
Glycerine, refd., CP, USP, 96%, dms., c.l., dlvd lb. .28½ - —
l.c.l., dlvd.....lb. .29 - —
tanks, dlvd.....lb. .27 - —
high gravity, dms., c.l., dlvd. lb. .29¼ - —
l.c.l., dvld .....lb. .29¾ - —
tanks, dlvd.....lb. .27¾ - —
yellow, refd., high gravity, lb. .28½ - —
l.c.l., dlvd. lb. .29 - —
syn., dms., c.l., dlvd.....lb. .29½ - —
l.c.l., dlvd. lb. .30 - —
tanks, dlvd.....lb. .28 - —
Glycine (see Acid aminoacetic)
Glycerol (see Glycerine).
Glyoxal, 30% dms. c.l., works lb .18½ - —
l.c.l. works lb .19¼ - —
tanks, works.....lb. .18 - —
Golden seal root NF tested bls lb. 3.50 - —
Graphite, amorph, powd., bgs., fib dms. ex whse lb .06 .09½
crystalline 88-90% powd., bgs., fib dms. ex whse lb .19 .21½
90-92% powd. bgs., fib. dms., ex whse lb 21 .24½
95-97% powd. bgs., fib. dms., ex whse lb 29 .31½
flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
No. 2 90-95% bgs. fib. dms., ex whse lb 29 .31
Grease, white, choice all hog tanks, dlvd.....lb. .08¼ - .08⅜
yellow, tanks, dlvd ...lb. .06¾ .07
Green, brilliant thioflavin, toner, molybdated PMA, kgs., works lb 5.10 - —
tungstated PTMA kgs. works. lb 6.40 - —
Green, chrome, CP, dark, light, medium, blue content 1 to 15%, bbls., N. of Tenn. and N.C., E. of Miss., including St. Paul, Minn., Davenport, Rock Island, St. Louis..lb. .40 - .42
16-30%, bbls., same basis.lb. .40 - .42
31-45%, bbls., same basis lb. .41 - .43
45-48%, bbls., same basis lb. .44 - .46
color, 25%...lb. .19 - .20
Chrome green prices are ½c. higher dlvd at the following points, except as noted:—Ala., Fla., Ga., La (Shreveport 1½c.), Miss., N. C., S. C., Tenn., Texas (Dallas, Ft. Worth, 1¼c.; El Paso, 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1c higher dlvd. Pac. coast; for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago
Chromium oxide, hydrated, bbls., fib. dms., c.l., frt. alld...lb. 1.20 - —
pure, bgs. c.l., frt. alld.... lb. .44¾ - —
l.c.l. same basis ..... lb. .45½ - —
Dyes (see Dyes, coaltar).
Malachite, straight, PTMA, bbls., works...lb. 5.30 - —
Paris (see Paris green)
Phthalocyanine toner bbls. works. lb. 3.95 - —
resinated, bbls lb 3.50 - —
water dispersable bbls lb 1.71 - —
Pigment B kegs lb 1.35 - —
Grindelia robusta herb bls .... lb .36 .40
Guaiacol NF, cryst. dms., tins lb 2.10 2.15
liq., cbys. dms lb 2.30 2.40
Carbonate, NF VII dms lb 3.40 3.45
Gum, aloe (see Aloe).
Arabic, amber, sorts, bgs..... lb. .21 .23
powd., USP, bbls ..... lb. .27 .29
Asafetida (see A).
Asphaltum (see A)
Benzoin, Sumatra, cs .....lb. .33 - —
Camphor (see C)
Cellulose, high vis. bgs. 23,000 lb lots or more works, frt alld lb .55 —
smaller lots same basis lb .57 —
Copal, Congo, No. 1, bgs. ... lb. .22½ - .25
No. 2, bgs. ..... lb .18½ .20
No. 3, bgs. ..... lb .15¼ .17
Manila, C, bgs.....lb. .35½ - .39
CBB bgs. ..... lb No stocks
DBB, bgs.....lb. .26 - .28¼
DK, bgs ..... lb No stocks.
dust, bgs ..... lb .14 Nom.
MA, soft, bgs ..... lb. .18½ .21
WS bgs ..... lb No stocks.
Philippine, pale, chips, bgs..lb. .21½ - .24
nubs, bgs ..... lb. .31¾ - .34
seeds, bgs ..... lb .20 .22
sorts, bgs ..... lb. .19¾ .22
Pontianak, chips, ogs. ..... lb. .26 —
nubs, bgs ..... lb. .37¾ .40
Dammar, Batavia, A E cs ....lb. No stocks.
dust, bgs ..... lb. .16 - .18
E, bgs..... lb. .20 .22



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Gum, dammar, East India, batu, bold, bgs lb. .13½- .15
nubs and chips, bgs lb. .08 - .09
black, bold, bgs lb. .14 - .16
unscraped, bgs lb. .11¾- .13
nubs and chips, bgs lb. .11½- .13
pale, chips, bgs lb. .12¾- .14
nubs, bgs lb. .17 - .19
Siam, cs lb. .36½- .39
Singapore, No. 1, bgs lb. .44¼- .46
No. 2, bgs lb. .31¾- .33
No. 3, bgs lb. No stocks.
dust, bgs lb. .16 - .18
seeds bgs lb 20 - .22
Ester, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., Mich., Mid-Atl States, N. E States, Minneapolis N. C., Ohio, St. Louis, St. Paul, Va., W Va lb. .14½- .16
Wood-rosin type, dms., c.l., same basis lb. .15 - .16
Guar, food grade, bgs lb. .50 - —
tech. grade, bgs lb. .40 - —
Karaya, No. 1, NF, powd., bbls lb. .50 - —
No. 2, powd., bbls lb. .35 - .38
No. 3, powd., bbls lb. .32 - .35
Locust bean, powd., bgs lb. .50 - —
Myrrh, cs lb. .55 - —
Opium (see Opium).
Olibanum siftings, cs lb. .20 Nom.
tears, cs lb. .22 - .30
Rosin (see Naval Stores, Protective Coatings Market).
Sterculia (see Gum Karaya).

Gum, tragacanth, No. 1, ribbons, cs lb. 4.50 - 4.70
No. 2, cs lb. 3.50 - 3.75
No. 3, cs lb. 3.25 - 3.40
powd., USP, bbls lb. 1.25 - 1.38
Gypsum, plaster of paris, 100-lb. paper, bgs., trucks, dlvd. N. Y. C ton 20.30 - —
Terra alba, dom., paper bgs., same basis ton 20.00 - —
works, N. Y. C ton 17.00 - —
imp., English, 100-lb. paper bgs., ex dock, N. Y. C ton 55.00 —
ex warehouse ton 60.00 62.00

H

Hawthorn berries, bgs lb 21 - —
Hellotropin, 100-lb. lots, dms lb 3.00 3.25
Hellebore root, dom., green, bls lb 70 75
Helonias root, bls lb 1.75 2.00
Hematine extract, cryst., No. 1, bbls., l.c.l lb. .47 - —
No. 2, bbls., l.c.l lb. .43 - —
No. 3, bbls., l.c.l lb .41 - —
No. 4, bbls., l.c.l lb. .39 - —
No. 5, bbls., l.c.l lb. .37 - —
paste, No. 1, bbls., l.c.l lb. .20½- —
Henbane leaves, bls lb. .35 .40
Heptane, indust., tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex gal. .14¾- —
Borger, Tex gal. 14¾- —

Hesperidin, purif., 25 lb. lots, f.o.b., works lb. 8.95 - —
Methylchalcone, bots., 50-lb lots, works lb. 22.50 - —
5-lb. lots, works lb. 23.00 - —
1-lb. lots, works lb. 23.50 - —
Hexachlorophene, dms lb. 1.94 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or N.Y.C. lb. .233 - —
1,000-19,999-lb. lots, same basis lb. .243 - —
smaller lots, same basis lb. .253 - —
fib dms., 1,000-lb. lots or more, same basis lb. .250 - —
smaller lots, same basis lb. .253 - —
USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd. N. Y. C. and Philadelphia lb. .42½- —
smaller lots, same basis lb. .43½- 43½
Hexane, indust., tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex gal. .15½- —
Borger, Tex gal. .15½- —
1-Hexanol, dms., c.l., works lb. .35 - —
l.c.l., works lb. .35¾- —
tanks, works lb .33 - —
Hexyl cinnamic aldehyde, dms lb. 4.00 - 7.50
Salicylate, dms lb. 1.75 - —
Hexylene glycol, dms., c.l., dlvd lb. .17 - —
l.c.l., dlvd lb. .18 - —
tanks, dlvd lb. .14½- —
α-Hexyl methacrylate, dms., less than truckload, works lb. .71 - —
Hexylresorcinol, USP, dms., 50-lb. lots or more, dlvd lb. 14.00 - —
smaller lots, dlvd lb. 14.50 - —
Homatropine hydrobromide, USP bots oz. 5.50 - —
Methylbromide, USP, bots oz. 3.90 - —

Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton 6.25 - —
Horehound herb, bls lb. .16 - .19
Hydrastis (see Goldenseal).
Hydrazine free base, ret. dms., works lb. No stocks.
Hydrate, 85%, ret. dms., works lb. 1.35 - 1.55
100%, ret. dms., works lb. 1.60 - 1.90
Hydrocortisone acetate bulk, bots., up to 500 gms gm. 4.75 - —
Alcohol, bulk, bots., up to 500 gms gm. 4.75 - —
Hydrofuramide, dms., fib ctns., works lb. .30 - .40
Hydrogen chloride, anhyd., 50-lb. cyls., c.l., works lb. .45 - —
t.c.l., works lb. .55 - .60
Fluoride anhyd., cyls., dlvd. E lb. .30½- .32½
dlvd W lb. .39 - —
tanks, works lb. .21 - —
Peroxide, USP bbls., dlvd lb. .03¾- .05
35%, dms., c.l., dlvd lb. .202 - —
l.c.l., dlvd lb. .211 - —
tanks, dlvd lb. .1800 - —
Hydroquinone, photo grade, bbls., dms lb. 1.03 - 1.06
tech., dms., c.l., dlvd lb. .82½- —
l.c.l., dlvd lb. .84½- —
Hydroxycitronellal, cns lb. 6.00 7.45
Hyoscine salts (see Scopolamine)
Hyoscyamine hydrobromide, bots. oz. 6.00 - 7.00
Sulfate, bots oz. 6.75 - 7.25
Hypernic extract, cryst., No. 2, bbls., l.c.l lb. .52 - —
liq., No. 1, bbls., l.c.l lb. .35 - —
No. 2, bbls., l.c.l lb. .27 - —

I

Ichthammol, NF, jars lb. .75 2.57
Indian red (see Red, Indian).
Indigo (see Dyes, coaltar, 1171 Indigo synthetic).
Indole, CP, bots lb. 16.50 - 21.00
Inositol, bots., dlvd lb 5.00 - —
dms., dlvd lb 4.50 4.75
Insect flowers (see Pyrethrum).
Iodine, crude, kgs lb. 1.10 - —
resub., USP, dms., jars lb. 2.30 2.32
Iodochlorohydroxyquinolin, USP, dms lb. 5.90 - —
Iodoform, NF, dms., kgs lb 4.90 5.00
α-Ionone, cns lb. 5.25 5.40
b-Ionone, cns lb. 5.40 5.70
Ipecac root, bgs., whole lb. 7.50 - —
powd., bbls., bxs lb. 7.85 - —
Irish moss, bleached, prime, bls lb. .28 - .34
Iron compounds (see Ferric or Ferrous). Oxides (see under Black, Brown, Red, and Yellow).
Isoborneol, cns lb. 1.25 - 1.70
Isobornyl acetate, cns lb. .46 - .70
Formate, dms lb. .80 - —
Propionate, dms lb 1.15 - 1.45
Isobutyl acetate, perfume grade, cns lb. .75 1.00
solvent grade, dms., c.l., dlvd E. of Rockies lb. .14¾- —
t.c.l., same basis lb. .15¾- —
tanks, same basis lb. .12¼- —
Isobutyraldehyde, CP, dms., c.l., dlvd lb. .27½- —
t.c.l., dlvd lb. .28½- —
tech., dms., c.l., dlvd lb. .21½- —
l.c.l., dlvd lb. .22½- —
tanks, dlvd lb. .19½- —
Isoeugenol, cns lb. 3.60 4.40
Isoniazid, powd., bulk, 25-kilo lots or more kilo 23.00 - 25.50
smaller lots kilo 24.00 - 26.00
Isopentane, coml. grade, tanks, f.o.b Tex, refy gal. .15½- —
Isonicotinic acid hydrazide (see Isoniazid).
Isophorone, dms., c.l., works lb. .24½- —
l.c.l., works lb. .25¼- —
tanks, works lb. .22½- —
Isopropanol (see Alcohol, Isopropyl).
Isopropyl acetate, dms., c.l., dlvd. lb. .13½- —
l.c.l., same basis lb. .14½- —
tanks, same basis lb. .11 - —
Alcohol (see Alcohol, Isopropyl).
Benzene (see Cumene).
Ether, dms., c.l., dlvd lb. .07 - —
l.c.l., dlvd lb. .08 - —
tanks, dlvd lb. .05 - —
Isopropyl-N-(3-chlorophenyl) carbamate, (CIPC), 70% in xylol, dms., c.l., t.l., works lb. .70 - —
l.c.l., works lb. .714 - .814
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works. lb. .75 - —
l.c.l., works lb. .80 - .90
Isoquinoline, dms., works lb. .65 - 1.25

J

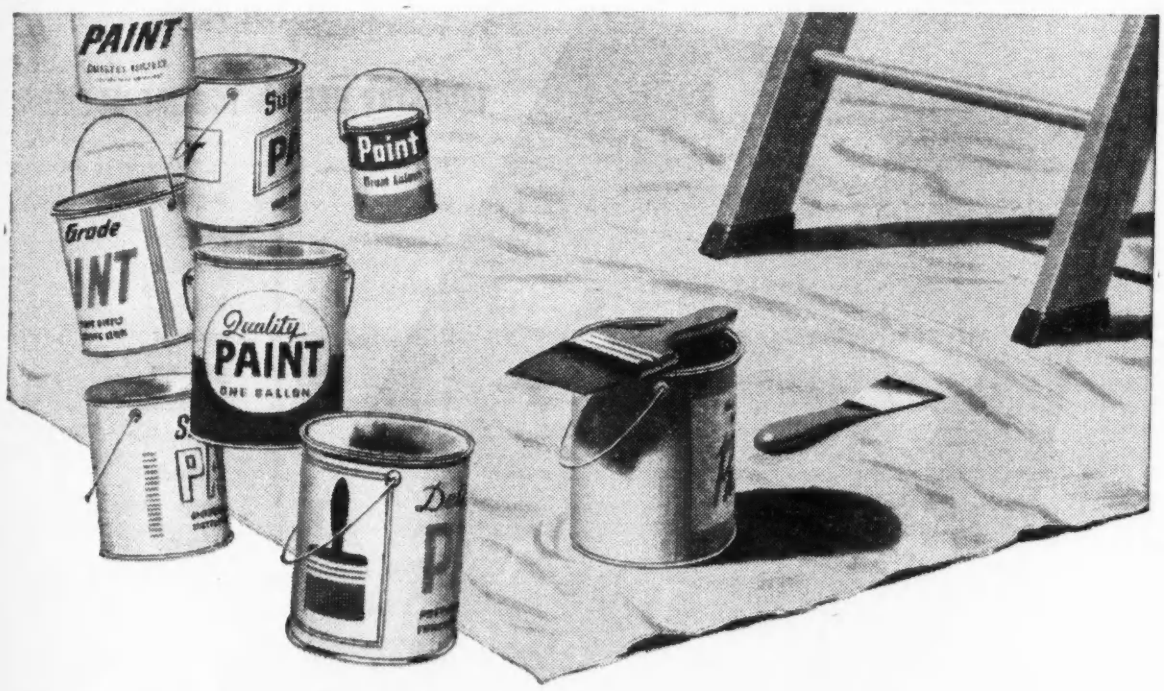
Jalap root, NF, bls lb. NP - —
powd., bbls., bxs lb. NP - —
Juniper berries, bgs lb. .18 - .20
Tar, NF, dpts lb. .42 - .60

K

Kaolin (see also Clay, China).
NF, powd., fib dms lb. .10 - .12
colloidal, fib. dms lb. 15½- .17¼
Kola nuts, bgs lb. .15 - —

L

Lactose, edible, bgs., 23,000-lb. lots, frt. equald lb. .14 - —
6,000-lb. lots, frt. equald lb. .14½- —
2,000-lb. lots, frt. equald lb. .14¾- —
200-lb. lots, frt. equald lb. .15¼- —
Edible lactose in fib. dms., ½c. higher.
fermentation grade, bgs., c.l., frt. equald lb. .08½- —
USP, fib. dms., 30,000-lb. lots, frt. equald lb. .21½- —
2,000-lb. lots, frt. equald lb. .22¼- —
200-1,800-lb. lots, frt. equald lb. .22¾- —
USP lactose in bgs., ½c. to 1c. lower.
Ladyslipper root, bls lb. Nom. —
Lanolin, cosmetic, dms., works lb. .27 - .29
USP, anhyd., dms., works lb. .25 - .27
hydrous, dms., works lb. .24 - .26
Lard, cash, dms., Chicago lb. .1365- —
Larkspur seed, bgs lb. .25 - —
Laurel leaves, bls lb. .12 - —
α-Lauryl methacrylate, dms., c.l. or t.l. works lb. .65½- —
Lavender flowers, medium, bls lb. .75 - .80
ord., bls lb. .25 - .40
select., bls lb. .90 - —
Lead acetate, white, cryst., bbls. lb. .25½- —
gran., bbls lb. .26½- —
powd., bbls lb. .26½- —
NF, cryst., gran., powd lb. .36½- —
Arsenate, acid, powder, dealers, 3-lb. bgs. or larger, c.l., frt. alld. on 96 lbs. or more lb. .27½- —
l.c.l., frt. alld lb. .28½- —
1-lb. bgs., c.l. lb. .41½- —
l.c.l. lb. .42½- —
Blue, basic sulfate, bbls., c.l., shipt. point, frt. alld. lb. .17¼- —
l.c.l., same basis lb. .18¼- —



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Exterior house paints based on Isophthalic—

***have** uniform through-dry—no paint wrinkling*
Oronite's extensive testing, plus results by leading resin manufacturers, prove Isophthalic greatly superior to other materials in this regard.

***have** faster drying properties*
The higher, more uniform molecular weights give a dry film — quicker.

***have** practically no yellowing in light tints*
With Isophthalic, oils can be used which greatly reduce the amount of normal paint yellowing.

***have** mildew resistance*
This quality appears to result from less unattached fatty acids present.

***have** outstanding flexibility characteristics*
At longer oil lengths greater flexibility results from higher proportion of flexible fatty acids in the molecule.

***have** better color retention*
Closer bonding of pigment particles give more uniform color appearance after application.

***can be** manufactured at lower cost*
Manufacturing costs can be reduced because more low-cost oils can be used.

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36, Avenue William-Favre, Geneva, Switzerland
4628

Lead carbonate (see Lead, white, basic carbonate).
Chloride, dms lb .45 - —
Iodide, NF V jars lb 3.62 - —
Linoleate, fused, 26%% Pb, dms. lb .33 - —
Metal pigs, prime, N. Y lb .16 - —
St Louis lb .1550 - —
Monosilicate, bgs., c.l., works, frt. equald lb .20 - —
t.c.l. same basis lb .2075 - —
Naphthenate, liq., 16% Pb., dms., dlvd lb .17 - —
24% Pb. dms., dlvd lb .21 - —
solid, 37% Pb., dms., dlvd lb .27½ - —
Nitrate, bbls lb .23¾ - —
Orthosilicate-silica gel, 50-60% PbO dms., works lb .29¾ - .34½
Peroxide, tech., powd, bbls lb .38¾ - .40¼
Phthalate, dibasic, dms, works lb .41 —
Red 95% Pb_3O_4, or less, bbls., c.l., works, frt. alld lb .19 - —
t.c.l., same basis lb .20 - —
97% Pb_3O_4, bbls, c.l., same basis lb .192 - —
t.c.l., same basis lb .202 - —
98% Pb_3O_4, bbls, c.l., same basis lb .1935 - —
t.c.l., same basis lb .2035 - —
Resinate, precip, 23% Pb, dms., dlvd lb .32½ - —
Salicylate, normal, dms, works, lb .46 - —
Silicate (see Lead, white, basic, silicate)
Sulfate (see Lead, blue, basic sulfate Lead white basic sulfate)
Tallate, liq., 16% Pb, dms lb .15 —
24% Pb., dms lb .18½ - —
solid 30% lb .23¼ - —
White, basic carbonate, bgs., c.l. shipt point, frt alld lb .19 - —
t.c.l., same basis lb .20 - —
silicate, bgs., c.l., shipt. point, frt. alld lb .17¼ - —
t.c.l., same basis lb .18¼ - —
sulfate bgs. c.l. shipt. point, frt. alld lb .17¼ - —
t.c.l., same basis lb .18¼ - —
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works lb .14 - .15
t.c.l., same basis lb .16 - .17
unbleached, non-ret. dms., c.l., same basis lb .13 - .14
t.c.l., same basis lb .15 - .16
Lemon bioflavonoid complex, 25-lb. lots, works lb 9.00 —
dl-Leucine, dms, works lb 12.25 -15.00
Licorice root, whole, bbls lb .10 - .12
gran., bbls lb .15 - .17
powd, bbls lb .12 .15
Lignosulfonate 70% tannin, bgs., c.l. works lb .06½ - —
t.c.l. works lb .06¾ - —
Lime, chemical (quicklime), bulk, c.l., metropolitan N Y destination, freight equalized with nearest producing point ton 20.46 - —
Hydrated, bulk c.l., same basis ton 21.96 - —
Spray, bgs., c.l., same basis ton 25.96 - —
Lime salts (see Calcium)
Lime-ammonium nitrogen 20.5% N (see Ammonium nitrate with dolomite)
Limestone grd., bgs, works ton 3.50 4.00
Linalool ex bois de rose oil, dms. lb 3.65 4.80
ex lignaloe wood oil, dms lb 5.30 7.10
Linalyl acetate ex bois de rose, 90-92%, dms lb 3.30 5.10
96-98% dms lb 4.05 6.75
ex petitgrain, bots lb 4.80 5.90
Lindane, 25% formulation, dealers, dms., frt. alld lb 1.58 - 1.68
99% tech formulators, dms., frt. alld lb 2.63 - 3.25
Linden flowers with leaves, bls lb .25 - —
without leaves, bls lb .30 - —
Linseed meal, expeller, 32-34% bulk Midwest, mills ton 39.00 - —
extracted 36% bulk same basis ton 53.50 -54.00
Litharge, coml., powd, bbls., c.l., works, frt. equald lb .18 - —
t.c.l., same basis lb .19 - —
Lithium benzoate, dms lb 1.65 - 1.67
Bromide, NF, dms, works, frt. equald lb 2.45 - —
Carbonate, NF, dms., c.l., t.l., dlvd lb 1.29½ - —
ton lots to t.l. dlvd lb 1.30 - —
tech., dms., c.l., t.l., dlvd., frt. alld, works lb .82 - —
t.c.l. same basis lb .85 - 1.11½
Chloride, CP, anhyd., ton lots lb 1.23½ - —
tech., anhyd., dms., c.l., t.l., dlvd. or works, frt. alld. lb 1.00 - 1.05
t.c.l. same basis lb 1.05 1.05½
Citrate, NF, dms lb 1.60 - 1.64
Fluoride, bbls., 10,000-lb. lots, dlvd. lb 2.17½ - —
ton lots, dlvd lb 2.18½ - —
less ton lots, dlvd lb 2.23½ - —
Hydride powd., dms., 500-lots, works lb 10.50 12.50
Hydroxide, monohydrate, dms., c.l., t.l., dlvd. or works, frt. alld lb .80 - .80½
t.c.l., same basis lb .81 - .81½
Manganite, dms., works lb .95 - 1.15
Nitrate tech. dms. 100-lb. lots. lb 1.25 - —
Salicylate, dms. lb 1.60 - 1.70
Silicate, dms., works lb 1.10 - 1.30
Stearate, dms., c.l., works lb .47½ - —
ton lots, works lb .48½ - —
less-ton lots, works lb .53½ - —
Sulfate, dms., 100-lb. lots lb 1.15 - —
Titanate dms. works lb 1.15 1.35
Lithopone, ord., bgs. c.l., dlvd. E lb .08 - —
t.c.l., dlvd E lb .08¾ - —
titanated (high-strength), bgs., c.l., dlvd lb .10 - —
t.c.l., dlvd lb .11 - —
Lobelia herb bls lb 1.50 —
Lobeline sulfate, bots., works oz 37.50 -38.50
Logwood extract, cryst, No 1, bbls., t.c.l lb .41 - —
No. 2, bbls., t.c.l. lb .39 - —
liq., No. 1, bbls., t.c.l. lb .20 - —
No. 2, bbls., t.c.l lb .19 - —
No 3, bbls., t.c.l lb .18½ - —
solid No 1 boxes, c.l. lb .35 - —
Lycopodium, ex lb 3.00 - 3.50
dl-Lysine monohydrochloride, fib. dms lb 12.00 - —
l-Lysine, fib, dms lb 12.00 -13.00

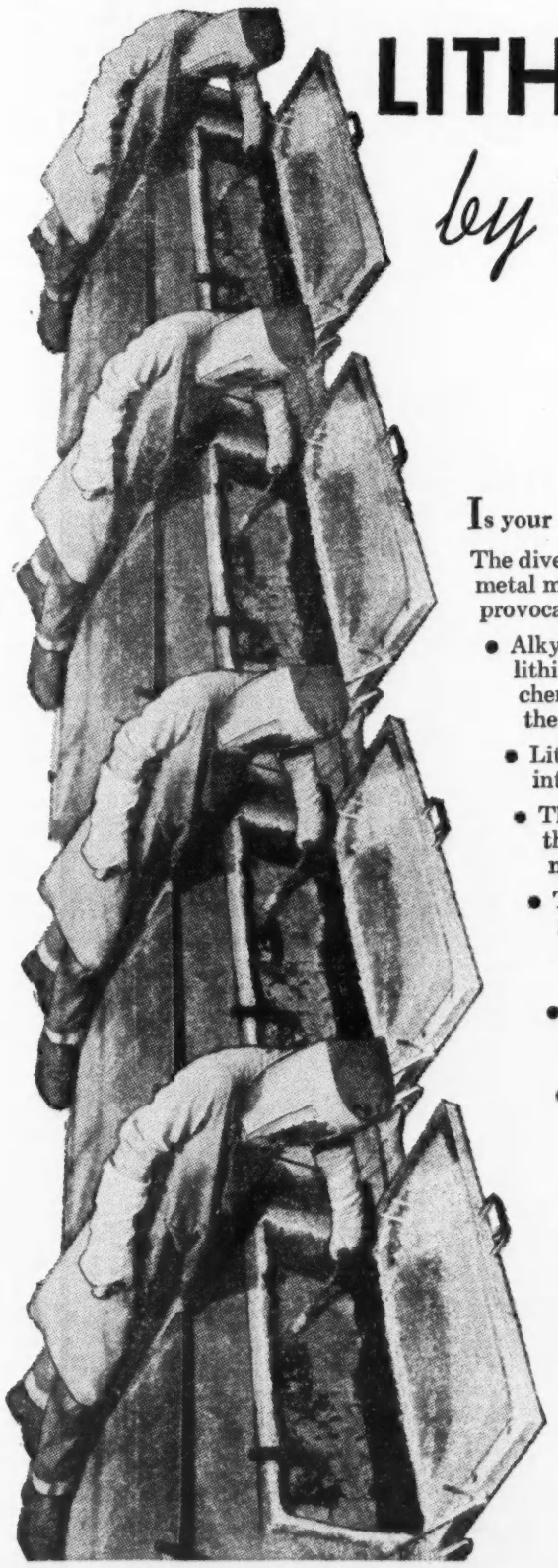
M

Mace, Siauw, siftings, bls lb 3.25 - —
West Indian, No 1, bls, shipment lb 3.25 - —
Magnesia, calcined, tech., bgs., ctns., works lb .25¼ - .26
syn. rubber grade, light, bgs., c.l., works lb .29¼ - —
extra light, bgs., c.l., works lb .29¼ - .30
t.c.l., works lb .30 - —
USP, light, bgs lb .35 - .36
heavy, fib, dms lb .45 - .52
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald ton 82.50 - —
dead-burnt, standard grain, bulk, c.l., Chewelah, Wash ton 40.00 - —
Magnesium bromide, jars lb .90 - 1.00
Carbonate, tech., bgs., c.l., frt. equald lb .10½ - —
t.l., frt. equald lb .11 - —
l.c.l., frt. equald lb .12 - .13
USP, bgs., c.l., frt. equald lb .12½ - —
t.l., frt. equald lb .13 - —
l.c.l. frt equald lb .14 .15

Above prices are quoted f.o.b. works, freight equalized with metropolitan New York and competitive producing points.

Chloride, anhyd., 92% flake or pebble, dms., c.l., works lb .12¾ - —
l.c.l., works lb .14 - .15
Gluconate, dms, cns lb 1.34 1.41
hydrous, 99% flake, bgs., c.l., works ton 55.00 —
l.c.l., works ton 65.00 -80.00
Hydroxide, NF, medicinal, bbls., dms., kgs lb .26½ - .30
Metal, 99.8% ingots, 10,000 lb. lots or more, works lb .36 - —
pigs, 10,000-lb lots or more, works lb .35¼ - —
sticks, cs., works, frt. alld. on carlots lb .59 - —
Oxide (see Magnesia, calcined).
Nitrate, cryst., dms., works lb .20 —
Peroxide, 15%, dms., works lb 1.00 - 1.05
Phosphate, tribasic, NF, bbls lb .75 - —
Silicate (see Talc)
Silicofluoride, dms, works lb .10½ .12
Sulfate, tech., bgs., c.l., works, l.c.l., same basis lb .14 - .15
t.c.l. works 100 lbs 2.90 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 2.35 - —
t.c.l. 5,000 lbs., 1 withdrawal 100 lbs 3.10 - —
smaller lots 100 lbs 3.35 - —

Magnesium trisilicate, USP, dms., 5,000-lb. lots lb .38 - —
1,000-lb. lots lb .40 - —
100-lb. lots lb .45 - —
Bulky and super grades of magnesium trisilicate, 7c. per lb. higher
Malathion, dms., c.l., works lb .90 - —
l.c.l., works lb .92 - 1.02
Maleic anhydride, dms., c.l., dlvd. E lb .28½ - —
l.c.l., dlvd. E lb .29½ - —
tanks, dlvd. E lb .27½ - —
Prices on maleic anhydride W. of Rockies, 1½c. higher.
Mandrake root, bls lb .53 - .60
Manganese acetate, bbls, dlvd lb .35 - —
Arsenate, bgs lb .16 - —
Borate, tech., fib, dms lb .25 - —
Carbonate, bbls., works lb .22 —
Chloride, anhyd., dms., works lb .25½ - —
Dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined, bgs., gross for net, works ton 148.00 - —
paper bgs., works ton 144.50 - —
dms., works ton 152.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb lots $3 per ton higher
Gluconate, dms lb 1.80 - 1.94
Hydrate, bbls., dlvd lb .36 —
Hypophosphite, NF, dms lb 3.52 - —
Manganese linoleate, liq., 4.35% Mn, dms. lb .32½ - —
solid, precip., 8.2% Mn, bbls lb .37½ - —
Naphthenate, liq., 6% Mn., dms., frt. alld lb .27 - —
Resinate, fused, 3½% Mn, dms. lb 24 - —
precip., 6½-7% Mn, dms lb 28 - —
Sulfate, fertilizer grade, 65% sulfate, c.l., dlvd S E ton 88.55 - —
t.c.l., dlvd S E ton 95.55 - —
Tallate 6%, dms lb 24 —
Mangrove bark, E. African, 38% tannin, c.l., ex dock ton 66.00 - —
So American 30% tannin, c.l., ex dock ton 35.00 - 58.00
Mannitol, com'l, fib dms., ton lots, works lb .60 - —
dms, to ton lots, works lb .62 - —
single dm., works lb .65 - —
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works lb .30 - —
t.c.l., works lb .31 - —
Menadione USP bots gram .044 .05
Menthol, nat., USP, Brazilian, cs lb 6.50 - 7.00
syn., USP, racemic, cns lb 4.75 - —
Menthyl salicylate tins lb 4.00 - 4.25
2-Mercaptobenzothiazole, bgs., fib, dms., ton-lots works, frt. alld lb .42 - —
less ton lots, same basis lb .44 - —
Mercaptobenzothiazyl disulfide, bgs., fib dms., ton-lots works, frt. alld lb .52 - —
less ton lots, same basis lb .54 - —



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- Lithium metal as a direct reducing agent now suggests an interesting potential.
- The polymerization of isoprene to "natural" rubber thru the catalytic medium of lithium metal dispersions is a new development.
- The military and peacetime uses of lithium metal in the field of heat transfer show great promise. Based on its low density, high heat capacity and high heat of fusion, lithium has no equal as a liquid metal coolant.
- Lithium metal is the starting material for the production of lithium hydride and, in turn, lithium amide and lithium aluminum hydride.
- Rocket and guided missile propellants utilize metallic "super-fuels." Many rely on complex compounds containing lithium metal or hydride. The key: lithium's tremendous reactivity.

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Mercuric chloride NF, cryst., dms., 50-lb lots or more lb 4.98 · —
gran. or powd., dms., 50-lb. lots or more lb 4.78 · —
Cyanide, NF, VIII, powd., fib. dms. lb 6.84 · —
Iodide red NF fib dms ib 7.72 · —
Oxide, red, NF powd., fib dms lb 5.97 6.01
Yellow, tech. (see Yellow mercury oxide).
USP, fib. dms lb. 6.14 · —
Mercurous chloride (see Calomel).
Iodide, yellow, NF lb. 7.72 · —
Mercury, ammoniated (see White precipitate USP).
Metal, 76 lb per flask net-flask. 255.00 257.00
Mesityl oxide, dms., c.l., dlvd lb. .14 · .14½
l.c.l., dlvd lb. .15 · .15½
tanks, dlvd lb. .11½· .12
Meta-aminophenol (see m-Aminophenol)
Metachloroaniline (see m-Chloroaniline)
Metanitroparatoluidine (see m-Nitro-p-toluidine).
Metanitroaniline (see m-Nitroaniline)
Metaphenylenediamine (see m-Phenylenediamine)
Metatoluidine (see m-Toluidine)
Metatolylenediamine (see 2,4-tolylenediamine).
Methanol, nat., denaturing grade, tanks frt. alld gal. 75 · —
syn. Zone 1, dms. c.l. dlvd. or truckload min. frt. alld. gal. .48½· —
l.c.l., works gal. .55½· —
tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area gal. .35½· —
4,000 gal., min., frt alld. or dlvd gal. .32½· —
4,000 gal., min., works, Carteret, Camden, N. J. gal. .30 · —
Methanol, syn., Zone 2, dms., c.l., or truckload min. frt. alld. or dlvd. gal. .51½· —
l.c.l., works gal. .58½· —
tankwagon, 2,000-4,000-gal. lots, min., dlvd. Metropolitan areas gal. .38½· —
tanks, 4,000 gal., min., frt. alld. or dlvd gal. .35½· —

Synthetic methanol zones are:—Zone 1 is all continental U. S. E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of U. S. west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

Methenamine (see Hexamethylenetetramine).
dl-Methionine fib. dms., frt. alld. 50-lb or more lb 3.50 · —
feed grade 98%, fib. dms., same basis lb 2.65 · —
Methoxychlor, 50% wettable powder, dealers dms., cs., frt. alld lb. .61 · .64
Methyl abietate, non-ret. dms., c.l., dlvd zone 1 lb. .20½· —
l.c.l. same basis lb. .21 · —
hydrogenated, non-ret., dms., c.l., dlvd, Zone 1 lb. .21 · —
l.c.l. same basis lb. .21½· —

Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis Minn., St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.

Acetone, nat., dms., l.c.l., E. of Miss., frt. alld. gal. .62½· —
Methyl acetone, syn., dms., c.l., frt. alld. E. gal. .63½· —
l.c.l., frt. alld. E gal. .69½· —
tanks, frt. alld. E gal. .48½· —

Synthetic methyl acetone E. territory is all States East of and including Colo., Mont., N. Mex. and Wyo. West territory all states west of those four.

Acrylate, dms., c.l., t.l., dlvd lb. .39 · —
t.t.l., dlvd lb. .40 · —
tanks, dlvd lb. .37 · —
Alcohol (see Methanol).
Amyl acetate dms., c.l., dlvd E. lb. .16 · —
t.c.l., dlvd. E lb. .17 · —
tanks, dlvd. E lb. .13½· —
Ketone, dms., works lb. 1.05 · —
Anthranilate, cns lb. 2.35 · 2.65
Benzoate, cns., dms lb. .60 · .75
Bromide jobbers, cyls., various sizes, frt. alld E lb. .47 · .61
Cellulose, special vis (1,500-4,000 ops.), 50 lb. bgs, c.l., works lb. .78 · —
2,000-lb. lots and more, same basis lb. .65 · —
smaller lots, frt. alld. on 100 lbs. lb. .89 · 1.00
standard vis. (15,400 cps.), 50-lb. bgs., c.l., frt. alld lb. .60 · —
2,000-lb. lots and more, same basis lb. .72 · —
smaller lots, frt. alld. on 100 lbs lb. .75 · .85
Chloride, indust., cyls., frt. equald, lb. .22 · —
tanks, multi-unit, same basis, lb. .15¾· —
single unit, same basis lb. .12 · —
refrigerator mfrs., cyls., dlvd. lb. .46 · .48
other consumers or service men, cyls., dlvd lb. .67 · —
Methyl chloroform (see 1,1,1-trichloroethane).
Cinnamate, cns lb. 1.55 · 1.80
Cyclohexanol, dms., c.l., works lb. .35½· —
t.c.l., works lb. .36 · —
tanks, works lb. .34 · —
Ethyl ketone, dms., c.l., dlvd. lb. .14½· —
l.c.l., dlvd lb. .15½· —
tanks, dlvd lb. .12 · —
Formate, refd., dms lb. .35 · .40
tech., non-ret dms., any quantity, works lb. .10 · —
Heptin carbonate bots lb. 31.00 42.00
p-Hydroxybenzoate, fib. dms. lb. 1.90 · 2.00
Ionone standard, cns., dms. lb. 5.00 5.25
Isobutyl carbinol, dms., c.l., dlvd. lb. .16½· —
l.c.l., dlvd lb. .17½· —
tanks, dlvd lb. .14 · —
ketone, dms., c.l., dlvd lb. .16½· —
l.c.l. dlvd lb. .17½· —
tanks, dlvd lb. .14 · —
Methacrylate, dms., c.l., t.l., frt. equald, with Melle, W. Va lb. .31 · —
smaller lots, same basis lb. .31½· —
tanks, same basis lb. .29 · —
Naphthyl ketone, cryst., cns lb. 3.00 4.30
Parahydroxybenzoate (see Methyl p-Hydroxybenzoate)
Roseaniline chloride, NF, fib. dms., 5-lb. dms. lb. 6.54 · —
Salicylate USP cns., 500-lb. lots lb. .59 · —
Testosterone USP 100-gram bots. gram .68 —
2-Methylbenzylamine, dms., t.c.l, works lb. 1.25 · —
2-Methylbenzyl dimethylamine, dms., c.l., works lb. 1.89 · —
t.c.l., works lb. 1.90 · —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .445 · —
t.c.l., works lb. .45 · —
tanks, works lb. .43 · —
Methylene blue, fib. dms., 100-lb. lots frt. adjusted lb. 3.40 · —
Chloride, tech., dms., c.l., dlvd. E. lb. .13¼· —
l.c.l., same basis lb. .16 · —
tanks, same basis lb. .11¾· —
b-Methylnaphthalene, 32°C. m.p., dms., works lb. .90 · —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-Phenyl-3-methylpyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint plastic, 100 mesh, bgs., c.l., works lb. .04 · —
roofing, 20 to 80 mesh, works lb. .03 · —
wet-grd., biotite, bgs., c.l., works, frt. alld E lb. .06½· —
t.c.l., ex-whse lb. .07¼· —
paint or lacq., bgs., c.l., 325 mesh, works, frt. alld. E lb. .08¼· —
t.c.l. ex whse or frt. alld. E lb. .09 · —
rubber, bgs. c.l., works, frt. alld. E lb. .08 · —
t.c.l., ex-whse or frt. alld. E lb. .08¾· —
wallpaper, bgs., c.l., works, frt. alld. E lb. .08¾· —
t.c.l. ex-whse or frt alld. E lb. .09 · —
white, 5-10 microns, bgs., c.l., works, frt. alld. E lb. .08¼· —
t.c.l. ex-whse or frt. alld. E lb. .09 · —

Mica, wet-grd. W of Miss. ½c higher; W of Rockies, 1c higher

Mineral spirits (see Petroleum mineral spirits).
Molasses, blackstrap feed grade, tanks, New Orleans gal. .27½· .28
New York gal. .29 · —
Molybdenum (metal), powd., 80 or 200 mesh, ctns., works kilo. 7.84 · —
325 mesh, ctns., works kilo. 9.13 · —
Trioxide, pure, dms., works lb. 1.15 · —
tech., dms., works, basis Mo. content lb. 1.39 · —
Monobutylamine, dms., c.l., E. of Rockies lb. .55½· —
l.c.l., same basis lb. .56½· —
tanks, same basis lb. .53 · —
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E lb. .10 · —
t.c.l., same basis lb. .11 · —
tanks, same basis lb. .08½· —
Monoethanolamine, dms., c.l., dlvd. E lb. .27½· —
l.c.l., same basis lb. .28½· —
tanks, same basis lb. .25 · —
Monoethylalphanapnthylamine (see N-Ethyl-a-naphthylamine).
Monoethylamine, 70% contained amine, dms., c.l., dlvd. E lb. .37½· —
l.c.l., dlvd E lb. .38½· —
tanks, dlvd E lb. .35 · —
Monoethylaniline (see N-Ethylaniline).
Monoethylorthotoluidin (see N-Ethyl-o-toluidine).
Monoisopropanolamine, dms., c.l., dlvd. E lb. .27½· —
l.c.l., same basis lb. .28½· —
tanks, same basis lb. .25 · —
Monoisopropylamine dms., c.l., dlvd. lb. .32½· —
l.c.l., same basis lb. .33½· —
tanks, same basis lb. .30 · —
Monomethylamine, 30-35% soln., dms., c.l., frt. equald, 100% basis. lb. .40 · —
t.c.l. frt. equald 100% basis. lb. .40½· —
tanks, frt. equald 100% basis. lb. .31 · —
40% soln., dms., frt. equald., 100% basis lb. .37 · —
t.c.l. frt. equald. 100% basis. lb. .37½· —
tanks, frt. equald 100% basis. lb. .31 · —
Monosodium fluoroacetate (see Sodium fluoroacetate monobasic).
Glutamate (see Sodium glutamate monobasic).
Phosphate (see Sodium phosphate monobasic).
Mono-tertiary-butylmetacresol (see 6-tert-Butyl-m-cresol)
Morphine, cns oz. 12.40 · 12.60
Acetate, anhyd., cns oz. 9.95 · 10.00
Hydrobromide, cns oz. 9.90 · 9.95
Hydrochloride, NF cns oz. 9.90 · 9.95
Sulfate USP cns oz. 9.90 · 10.05
Morpholine, dms., c.l., dlvd E lb. .55¼· —
l.c.l., dlvd E lb. .56¼· —
tanks, dlvd. E lb. .52¾· —
Musk, syn., ambrette, 100-lb. lots, fib. dms lb. 4.45 · 5.15
25-lb. lots, cns lb. 5.05 · 5.65
5-lb lots, cns lb. 5.20 · 5.50
ketone, 100-lb. lots, fib. dms. lb. 4.70 · 5.30
25-lb lots cns lb. 5.35 · —
5-lb. lots, cns lb. 5.45 · —
xylol, 100-lb lots, fib. dms lb. 1.40 · —
25-lb lots, cns lb. 1.45 · —
5-lb. lots, cns lb. 1.50 · —
Mustard seed, Danish, yellow, bgs lb. .10½· —
Du ch, bgs. lb. .10½· —
English, yellow, bgs. lb. .11 · —
Montana, oriental, bgs. lb. .08½ Nom.
Yellow, bgs lb. .10½· —

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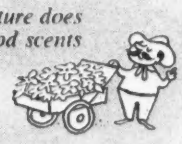

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Myrobalans, J-1, genuine, bgs., ex-dock ton 63.00 -64.00
crushed, bgs., ex dock ton 79.00 -80.00
Bombay, bgs., ex dock ton 61.00 -62.00
Extract, Indian, solid, 55% tannin, bgs., ex dock, plus duty lb. .10 - .10¼

N

Naphtha, painters (see Petroleum naphtha V. M. & P.).
Solvent (see S)
Naphthalene, crude, dom., 74°, tanks, frt. equald lb. .06¼- —
78° bgs., c.l., same basis lb. .07½- .08
l.c.l., same basis lb. .07¾- .08¼
tanks, same basis lb. .07 - —
imp., 78° bgs., large lots lb. .05 Nom.
refd., indust., chipped, crushed, bgs., frt. alld lb. .12½- —
tanks, same basis lb. .11¾- —
balls, flakes, wholesalers, jobbers, bbls., c.l., same basis, lb. .15½- —
cs., 50 lbs., c.l., same basis lb. .15¾- —
1-lb. pkgs., c.l., same basis lb. .18½- —
a-Naphthol, bbls., frt. alld lb. 1.00 - —
b-Naphthol, tech., flake, bbls., c.l., works lb. .33 - —
l.c.l., works lb. .35 - —
a-Naphthylamine bbls. frt. alld lb .50 - —
b-Naphthylamine tech. flake, bbls., works lb. 1.60 - —
Neocinchophen USP dms., frt. adjusted lb. 7.00 - 8.00
Neomycin sulfate, fib. dms., 5 kilo lots, basis, activity gram. .43 - —
100-999 gram lots, basis, activity, gram. .53 - —
Nerolin, cns lb. 2.45 - 2.63
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd lb. .77 - .90½
Carbonate bbls. dlvd lb. .73¾- .81¾
Chloride bbls. dlvd lb. .38½- .46½
Formate bbls. ton lots, frt. alld lb. .68 - .69
Metal, electro cathodes, cs., works lb. .74 - —
Nitrate, bbls. works lb. .37 - .38
Oxide, black, bbls lb. .84 - —
green, bbls lb. .85 - —
Sulfate, bgs., c.l., dlvd lb. .30¼- —
l.c.l., dlvd lb. .31¼- .38¼
Nicotinamide USP, dms., frt. adjusted kilo 12.00 -12.30
Hydrochloride dms. frt adjusted. kilo 11.50 -11.80
Nicotine sulfate, 40%, dealers, 50-lb. dms., frt. alld lb. 1.20 - —
manufacturers, 500-lb. dms., frt. alld lb. 1.03 - —
Niger seed, bgs lb. .12 - .12½
Nikethamide, cbys lb. 7.50 - —
m-Nitroaniline cryst., dms. frt. alld. lb. 1.15 - —
paste, dms., frt. alld., 100% basis. lb. 1.10 - —
o-Nitroaniline, flaked, dms., t.l., frt. alld lb. .49 - —
t.t.l., frt. alld lb. .51 - —
p-Nitroaniline, dms., frt. alld lb. .445 - —
Nitrobenzene, dbl dist., dms., c.l., frt. alld lb. .14 - —
l.c.l., frt. alld lb. .15 - —
tanks, frt. alld lb. .12 - —
Nitrocellulose, ester soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175, secs., bbls., c.l., works lb. .34 - —
l.c.l., same basis lb. .35 - .37
18-25 cps. bbls. c.l., same basis lb. .36 - —
l.c.l., same basis lb. .37 - .39
250-400, 600-1,000 secs., bbls., c.l., same basis lb. .39 - —
l.c.l., same bassi lb. .40 - .42
spirit-soluble, 30-35 cps., ¼, ½, secs., bbls., c.l., same basis lb. .41 - —
l.c.l., same basis lb. .42 - .44
5-6 cps., 40-60 secs, bbls., c.l., same basis lb. .40 - —
l.c.l., same basis lb. .41 - .43
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable
o-Nitrochlorobenzene dms. c.l., frt. alld lb. .15 - —
l.c.l. same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Nitrochlorobenzene, dms lb. .26 - .27
3-Nitro-4-chlorophenol, dms lb. .75 - —
Nitroethane, dms., c.l., dlvd. E lb. .24 - —
l.c.l., dlvd E lb. .24¾- —
tanks, dlvd E lb. .22½- —
Nitroethane prices West of Rockies are 1c. higher.
Nitrogen solutions, tanks, frt. equald. unit, 1.14 - —
Nitrogenous process tankage, bulk, works unit-ton. 3.00 - 4.00
Sewage sludge, bulk, works, unit-ton. 2.95+ .50
Nitromethane, dms., c.l., dlvd. E lb. .24 - —
l.c.l., dlvd E lb. .24¾- —
tanks dlvd E lb. .22½- —
Nitromethane prices West of Rockies are 1c. higher.
a-Nitronaphthalene bbls., frt. alld. lb. .41 - —
Nitropropane-1 and -2, dms., c.l., dlvd. E lb. .22½- —
l.c.l., dlvd. E lb. .23¼- —
tanks, dlvd. E lb. .21 - —
Nitropropane prices West of Rockies are 1c. higher.
o-Nitrophenol dms. works, frt. equald lb. .94 - —
p-Nitrophenol dms. frt. alld., c.l. lb. .51 - —
l.c.l., lb. .53 - —
o-Nitrotoluene, dms., c.l. frt. alld. lb. .10 - —
l.c.l. frt. alld lb. .11 - —
tanks frt. alld lb. .09 - —
p-Nitrotoluene, dms., works lb. .33 - —
m-Nitro-p-toluidine dms lb. 1.59 - —
Nitrous ether conc. bots 100-lb. lots lb. 1.28 - 1.38
Nonyl phenol dms. c.l. frt. alld. lb. .26½- —
l.c.l., frt. alld lb. .27½- —
tanks, frt. alld lb. .24½- —
Nutgalls, Aleppo bgs lb. .36 - .38
Chinese bgs lb. No prices.
Nutmeg, East Indian, bgs lb. 2.80 - —
West Indian, bgs lb. 2.80 - —
Nux vomica, bls lb. .10 - .12
powd. bbls., bxs lb. .15 - .17

O

Octane, indust., tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex gal. .15¾- —
Borger, Tex gal. .15¾- —
i-Octanol, tech. dms., c.l., dlvd. lb. .33 - —
l.c.l. dlvd lb. .37 - —
tanks, dlvd lb. .32½- —

Octyl phenol, bgs., c.l., works lb. .24 - —
l.c.l., works lb. .24½- —
tanks, works lb. .23 - —
Drum prices for octyl phenol are 11c higher

(Essential oils prices listed below are f.o.b. New York, with differences between high and low quotations due to differences in quantity quality or in individual suppliers. views.)

Oil, abies, siberica, cns lb. 4.00 - —
Almond, artif., bitter (see Benzaldehyde).
nat., bitter, F.F.A., bots lb 3.00 3.75
NF, bots lb 3.25 3.75
sweet, USP, cns. dms lb. 1.25 - —
Allspice (see Oil, pimento).
Amyris, dms. lb 1.25 - —
Angelica root, bots lb. 66.00 -100.00
seed, bots lb. 56.00 -95.00
Aniline (see A).
Anise, USP, dms lb 3.50 4.00
Apricot, kernel, USP, dms lb. 1.00 - 1.05
Avocado cns lb 3.25 —
Bay, NF, Puerto Rican, 50-55%, cns lb. 2.15 - 3.00
55-60%, cns lb. 2.50 - 3.00
West Indian, 50-55% cns., dms., lb. 1.85 2.40
Bergamot, nat., NF, Italian, cns. lb. 10.00 - —
Birchtar, crude, cns lb. 1.50 - 1.90
rectified, cns. lb. 1.75 - —
Bois de rose, Brazil, dms lb. 3.50 - —
Mexican (see Oil, lignaloe wood).
Bone, dms., works lb. .65 - .70
Cajeput, native, cns. lb. 1.75 - 3.30
redist., USP, cns lb 2.25 3.40
Calamus, bots lb. 12.00 -20.00
Camphor, sassafrassy, dms lb. .30 - .43
white, dms lb. .29 —
Cananga, native, cns lb. 8.50 - 8.75
rectified, cns lb. 10.00 -13.00
Caraway, NF, cns lb. 3.65 - 4.00
Cardamom, NF, bots lb. 38.00 -40.50
Cassia, USP (see Oil, cinnamon, USP).
Castor, dom., blown, dms., c.l. lb. .2800- —
l.c.l. lb. .2900- —
dehydrated, bodied, dms., c.l. lb. .2960- —
l.c.l. lb. .3060- —
tanks lb. .2760- —
unbodied, dms., c.l. lb. .2810- —
l.c.l. lb. .2910- —
tanks lb. .2610- —
hydrogenated, bgs., ton lots lb. .3325- —
l.c.l., dlvd lb. .3525- —
No. 1, dms, c.l. lb. .2450- —
l.c.l. lb. .2550- —
tanks lb. .2250- —
No. 3, tech., dms., c.l. lb. .2275- —
l.c.l. lb. .2400- —
tanks lb. .2100- —
USP, dms., c.l. lb. .2600- —
l.c.l. lb. .2700- —
tanks lb. .2400- —
refined, deod., dms., c.l. lb. .29 - —
l.c.l. lb. .30 - —
Imp., No. 1, Brazilian, tanks lb. .22 - .22¼
Sulfonated, 50%, dms., works lb. .15¼- .15½
75%, dms., works lb. .20 - .20½
Cedarleaf, USP, XIII, cns., dms. lb 3.65 - —
Cedarwood, cns., dms lb. .65 - 1.00
Celery seed, bots. lb. 15.00 - —
Chamomile, blue, Hungarian, bots. lb. 225.00 - —
Chenopodium, NF, cns lb. 4.50 - 4.75
Chinawood (see Oil, tung).
Cinnamon, bark, bots lb. 36.00 -70.00
leaf, crude, dms lb. 1.60 2.00
USP cns., dms. (Cassia) lb 10.25 -10.90
Citronella, Ceylon, cns., dms lb. .90 - —
Java, cns lb 1.95 - —
Java-type, cns lb. 1.50 - —
Clove, bud, USP, cns., dms lb. 3.25 - —
leaf, crude dms lb 1.20 - 1.50
Coconut, crude, tanks, N. Y. lb. .12⅝- —
Pac. coast lb. .11¼- —
refd. Cochin type dms. tax incl. lb. .19¼- .19½
deodorized, tax incl., dms lb. .22¼- .23¼
Cod, Newfoundland, dms lb. .11⅜- .11⅞
Codliver, USP, dms gal. 1.45 - 1.55
Copaiba, cns. lb 1.75 2.50
Coriander, USP, bots. lb. 10.50 - —
Corn, crude, tanks, works lb. .15 - —
foots (soapstock), acid 95%, tanks, N. Y. lb. .06¼- —
refd., salad, dms lb. .2066- —
tanks lb. .1866- —
Costus, bots oz. 6.00 - —
Cottonseed, crude, tanks, South, East lb. .14¾- —
Valley lb. .14⅝ Nom.
Texas, Lubbock lb. .14¾ Nom.
Waco lb. .15 Nom.
foots (soapstock), acid 95%, tanks, N. Y. lb. .05 - —
refd., salad, dms lb. .20⅝- .20¾
tanks lb. .18⅝- —
Creosote (see Creosote, coaltar).
Cubeb, cns lb 4.10 - 4.25
Cumin, bots., cns lb 4.75 5.00

This Label Is Your ASSURANCE of FIRST GRADE, HIGHEST QUALITY LEMON OIL

because...

- The M.C.P. label is that of one of the nation's oldest specialists in quality citrus products — pectins, juices, concentrates, etc.
- It's the *producer's* label — which means that M.C.P. LEMON OIL is pure and unadulterated...cold-pressed in California and *packed by the producer* . . . to assure the user receiving it pure and unadulterated.
- It identifies M.C.P. LEMON OIL as one that meets all the long-accepted standards for highest quality and finest flavor.
- There is but one M.C.P. LEMON OIL label, and this is what it means:—*An exclusively first grade lemon oil, for M.C.P. packs but this one top grade!*

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MUTUAL CITRUS PRODUCTS COMPANY
Since 1928 Growers and Processors of Citrus Products

Distributed by

MUTUAL CITRUS PRODUCTS CO.
424 South Atchison Street, Anaheim, Calif.

W. J. BUSH & CO., INC.
137 Boston Post Road, Cos Cob, Conn.

Oil, Cypress—Orange Chrome

Oil, cypress, bots ..... lb. 5.30 - —
Degras (see D).
Dillseed, bots ..... lb 2.80 4.25
Dillweed, dom., bots., dms lb 3.25 4.25
Dip (see D)
Erigeron, cns ..... lb. 5.50 - 7.50
Eucalyptus, NF, rect., 70-80% dms. lb. .62 —
80-90%, dms. lb 72 —
Fennel, sweet, USP, cns ..... lb 2.85 - —
Fir, Canada, cns ..... lb 4.75 - —
Fish, refd., alkali, dms ..... lb. .1450- .1500
kettle-bodied, dms ..... lb. .1630- .1730
light-pressed, dms ..... lb. .1300- .1350
tanks ..... lb. .1150- —
Fishliver, crude for feeds or concentrating 4,000 to 12,000 A units per gram dms., 1,000,000 units .08 .09
10,000 to 20,000 A units per gram, dms., 1,000,000 units .09 .10
25,000 to 35,000 A units per gram, dms. 1,000,000 units .09 .10
40,000 to 55,000 A units per gram dms. 1,000,000 units. .10½- .11
100,000 A units per gram., dms 1,000,000 units. .14 —
200,000 A units per gram., dms 1,000,000 units. .15½- —
500,000 A units per gram., dms 1,000,000 units. .16 —

Prices above are based on the USP XIV method of conversion. Morton Stubbs Corrected E x 1900

Oil, fusel (see F).
Garlic, pure, bots ..... oz. 4.75 - —
Gaultheria (see Oil, wintergreen)
Geranium, Algerian, cns lb. 13.50 -14.50
Bourbon, cns ..... lb. 14.25 - —
Turkish (see Oil palmarosa)
Ginger, dist., bots ..... lb. 21.50 -24.50
Grapefruit dms ..... lb. 1.65 —
Grease No 1, dms, c.l ..... lb .15¼ —
l.c.l. ..... lb. .16¼- .18¼
extra winter strained dms, c.l. lb. .17¼ —
prime, burning, dms, c.l ..... lb. .18¾- —
l.c.l. ..... lb. .19¾- 21¼
Guaiacwood, cns. ..... lb. 1.60 —
Hemlock, cns ..... lb 2.10 - 2.30
Juniper berry, bots. ..... lb 2.75 - 4.00
twice rectified, bots ..... lb 3.60 4.00
Far, NF (see Juniper tar)
Wood, tech., cns. lb .38 .55
Lard (see Oil, grease)
Laurel leaf, dms, cns ..... lb 9.75 -12.50
Lavandin dms, cns ..... lb 2.55 2.95
Lavender, flower, USP, French, 35-37% ester, cns ..... lb. 7.00 - —
38-40% ester, cns ..... lb 9.25 -10.00
40-42% ester cns ..... lb 10.00 -14.00
spike, Spanish, cns ..... lb. 2.60 - —
Lemon, USP, Calif., cns., dms lb 4.25 - 5.00
Messina cns ..... lb 5.75 —
terpeneless bots ..... lb 50.00 -85.00
Lemongrass, cns., dms ..... lb. 1.65 - —
Lime, dist., Mexican, cns ..... lb. 5.00 - —
West Indian, cns ..... lb. 5.00 - —
expressed West Indian, cns lb 6.00 8.00
terpeneless, bots. ..... lb 30.00 -85.00

Oil, lignaloe wood, Mex., cns .... lb. 4.65 - 5.00
Linseed, raw, dms., c.l., N. Y. lb. .1670- —
l.c.l. ..... lb. .1770- .1820
tanks, f.o.b. Minneapolis .. lb. .1340- —
New York ..... lb. .1480- —
tankwagon, New York ..... lb. .1510- .1520
Boiled linseed oil .006c per lb higher.
Mace, dist., cns., dms ..... lb. 11.00 - —
Mandarin (see Oil, tangerine).
Menhaden, crude, tanks, works, Atlantic & Gulf .. lb. .09¾ Nom.
Mineral, white (see Oil, white mineral).
Mirbane (see Nitrobenzene).
Mustard seed, nat., dms. ..... lb. .17½ Nom.
syn., bots ..... lb. 1.60 - 1.85
Neatsfoot, 15° cold test, dms lb. .30 - .33
20° cold test, dms ..... lb. .29 - .32
30° cold test, dms ..... lb. .28 - .31
Neroli, NF, French bots ..... lb. 575.00 - —
Nutmeg, USP, dist., East Indian, cns., dms .. lb. 14.50 - —
West Indian, cns., dms .... lb. 14.50 - —
Ocotea cymbarum, dms ..... lb. .50 - .60
Oiticica, liq., dms ..... lb. .17¼- .17½
tanks ..... lb. .15¾- .16
Oleo, extra, dms ..... lb. .19½ Nom.
Olibanum, bots ..... lb 5.50 7.65
extra fine, bots ..... lb 8.00 9.00
Olive, edible, Spanish, dms., duty-paid gal. 3.50 - 3.60
Orange, expressed, USP, Brazilian, cns., dms ..... lb. No stocks.
Calif., cns., dms ..... lb. .60 - 1.75
Florida, cns., dms ..... lb. .50 - .60
Messina, cns ..... lb. 3.85 - 5.85
West Indian, cns., dms. lb. 2.50 - 3.65
sesquiterpeneless, bots. .. lb. 65.00 -120.00
Origanum, Spanish, cns ..... lb 2.00 —
Palm, clarif., dms ..... lb. .15¾- .16¾
Palmarosa, cns ..... lb. 8.25 - 9.00

Oil, paraffin, pale, 100-110 vis., at 100°F. tanks, East Coast refy gal .14 - —
Patchouli, dms ..... lb. 6.00 - —
Peach kernel, USP (see Oil apricot kernel).
Peanut, crude, tanks, f.o.b. mills. lb. .17 - —
refd., dms. ..... lb. .21¾- —
tanks ..... lb. .19¾- —
Pennyroyal, USP, imported, cns. lb 2.75 3.50
Peppermint, nat., dms ..... lb. 4.75 - 6.50
redist., USP, dms ..... lb. 5.25 - 6.75
Persic, USP (see Oil apricot kernel)
Petitgrain South American, cns. dms. 3.00 - —
Pimento, berry, NF, dms lb 4.50 5.00
leaf, cns. ..... lb. 2.05 - 2.60
Pine, dest.-dist., dms., l.c.l., works. lb. .12¼- —
ex whse. lb. .14¼- —
steam-dist.., dms., ex whse. N.Y.C lb. .176 - —
dlvd. lb. .179 - —
Pineneedle, Siberian (see Oil, abies siberica)
Rapeseed, tankcars ..... lb. .18¾- —
Red (see Acid, oleic).
Rice bran, clarif., dms., l.c.l lb. .18 Nom.
tanks, dlvd E ..... lb 15 - .15½
Rose, nat., Bulgarian, bots .... oz. 70.00 - —
Rosemary, Spanish, NF, cns., dms. lb. .60 - 1.00
(tech. cns dms lb 50 70
Rue, bots ..... lb 2.00 2.50
Safflower, dms., N. Y. ..... lb. .1785- .1835
tanks, same basis ..... lb .1585- —
Sage, clary bots ..... lb. 18.75 19.00
Dalmatian, cns ..... lb. 4.30 - —
Spanish cns ..... lb 1.20 1.45
Sandalwood, cns ..... lb. 15.50 - —
Sardine crude tanks Pac coast lb. .08½- .08¾
Sassafras, artif., dms ..... lb. .50 - .62
nat., dom., dms. ..... lb. 1.45 - 2.10
imp., Brazilian (see Oil, ocotea cymbarum).
Savin, cns lb 2.75 - —
Savory, cns lb 4.25 - —
Sesame, USP, dms ..... lb. .38 - .39
Shingle stain tar distillate, dms., c.l., works gal. .35 —
l.c.l., works gal. .44 - —
tanks, works gal. .23 —
Snakeroot, Canada, cns. ..... lb. No stocks.
Soybean, crude, tanks, Decatur. lb. .14⅜- —
foots soapstock, acid 95% tanks, N. Y. . lb. .06¾- —
refd., alkali, dms. ..... lb. .1916- .1937
tanks ..... lb. .1716- —
clarified, dms. ..... lb. .1866- —
tanks ..... lb. .1666- .1687
salad, dms ..... lb. .1946- .1962
tanks ..... lb. .1746- —
Spearmint, dms. ..... lb. 4.40 - —
Sperm, bleached winter, 45°, dms. lb. .1675- .1725
tanks ..... lb. .1500- —
nat. winter, 45° dms ..... lb. .1575- .1625
tanks ..... lb. .1400- —
Spruce, cns., dms ..... lb. 2.10 - 2.75
Sweet birch, USP, Northern, cns. lb. 4.25 9.50
Southern, cns lb. 2.30 2.75
Tall, crude, dms., c.l., works .. lb. .04¼- —
tanks, works ..... lb. .03 - —
dist., dms., c.l., works ... lb. .07½- —
l.c.l. works ..... lb. .07¾- —
tanks, works ..... lb. .06 - .06¼
refd., dms. c.l., works .... lb. .06½- .06¾
l.c.l. works ..... lb. .06½- .06¾
tanks, works ..... lb. .06¾- .07¾
Tallow, acidless, dms., c.l. ..... lb. .05¼- .05¾
l.c.l. ..... lb. .13½- —
Tangerine, Floridian, dms ..... lb. .14½- .16
Tansy, dms ..... lb. 2.00 - 3.80
Tar acid (see T's). lb. 7.50 - 8.40
Pine, comm., dms., c.l., works lb. .0561- —
l.c.l., works ..... lb. .0634- —
whse ..... lb. .0745- —
tanks works ..... lb. .046 - —
rectified, NF, dms., incl., l.c.l., works, South gal 1.05 - —
ex whse, N Y C gal. 1.15 - —
refd., dms., incl., l.c.l., works. gal. .92 - —
ex-whse, N.Y.C. ..... gal. 1.02 - —
Theobroma (see Cocoa butter).
Thyme, NF, red., cns., dms .... lb. 1.45 - 1.75
white, cns. ..... lb. 1.70 2.00
tech. white cns ..... lb 40 1.85
Tung, dms., c.l., N. Y. ..... lb. .24¼- —
l.c.l., same basis ..... lb. .24½- .25
tanks, N. Y. ..... lb. .22¾- —
domestic mills ..... lb. .23 Nom.
Turpentine, NF cns. dms. ... lb .28 .45
Veviter, Bourbon, cns ..... lb. 11.75 -11.90
Haitian, cns. ..... lb. 9.25 -10.00
Java cns ..... lb. 18.50 -20.00
Wheat germ, 5-gal. dms ..... gal. 11.25 - —
Turkey red (see Oil, castor, sulfonated).
White mineral, tech., 50-65 vis., non-ret. dms c.l., f.o.b. N Y gal. .55 - —
65-75 vis., non-ret., dms., c.l., same basis gal. .56 - —
l.c.l., same basis gal. .61 - —
80-90 vis., non-ret., dms., c.l., same basis gal. .57 - —
l.c.l., same basis gal. .62 - —
135-138 vis., non-ret. dms., c.l., same basis gal. .63 - —
l.c.l., same basis gal. .68 - —
145-155 vis., non-ret. dms., c.l., same basis gal. .69½- —
l.c.l., same basis gal. .74½- —
USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .71 - —
l.c.l., same basis gal. .76 - —
200-210 vis., non-ret. dms., c.l., same basis gal. .75 - —
l.c.l., same basis gal. .79 - —
345-355 vis., non-ret. dms., c.l., same basis gal. .78½- —
l.c.l., same basis gal. .84½- —
Wintergreen, USP, nat., Northern, cns lb. 6.35 -10.30
Southern cns lb 3.20 -19.50
syn (see Methyl salicylate)
Wood (see Oil, tung).
Wormseed (see Oil, chenopolium, NF).
Wormwood, cns ..... lb. 5.50 - 6.85
Ylang-ylang, Bourbon, bots ..... lb. 14.00 -16.00
extra, bots ..... lb. 28.00 -40.00
Madagascar, bots ..... lb. No stocks
Oleostearine, dms ..... lb. .14½- .15
Opium, USP, cns ..... oz. 19.20 -19.45
gran., USP, cns ..... oz. 21.65 -21.90
powd. USP cns ..... oz. 21.65 -21.90
Orange cadmium-selenide lithopone, light shade, bbls., frt. alld. E. of Rockies lb. 1.80 - —
deep shade, bbls lb. 2.00 - —
Cadmium-mercury lithopone, deep shade, bbls lb. 1.78 - —
Chrome, CP, bbls., dlvd. N. of Tennessee and N.C., E. of Miss. R., include Davenport, Tenn., and E of Minneapolis, Rock Island, St. Louis, St. Paul . lb. .35 - —

Chrome orange prices are ½c. higher, dlvd. Ala., Fla., Ga., La. (Shreveport); 1½c. Miss., N. C., S. C., Tenn., Dallas and Ft. Worth, Tex., El Paso, Tex.; 2c. Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. higher dlvd. Pac. Coast for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.

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Exchange

LEMON OIL U.S.P.
CALIFORNIA COLD-PRESSED

Sunkist Growers PRODUCTS DEPARTMENT • ONTARIO, CALIFORNIA

Distributed in the U.S. and Canada by

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FRITZSCHE BROTHERS, INC. 76 Ninth Avenue New York 11, N.Y.
UNGERER & COMPANY, INC. 161 Avenue of the Americas New York 13, N.Y.

Inquiries from countries other than the U.S. and Canada should be directed to the Products Dept., Sunkist Growers.

Orange, dinitroaniline toner, CP, lb. 1.50 - —
Mineral American, bbls., l.c.l., works lb. .2235- —
Molybdated, bbls lb. .48 - —
o-Nitroaniline toner, kegs lb. 1.35 - —
Orange peel, bitter, Haitian, bls lb. 14 - .16
sweet, bls lb 16 - .18
Orris root, Florentine, bls lb. 55 - —
powd., bbls., bxs lb. .68 - —
Verona, bls lb. 35 - .40
powd., bbls., bxs lb 45 - —
Orthoaminobiphenyl (see o-Aminobiphenyl)
Orthoanisidin (see o-Anisidine)
Orthochloroanilin (see o-Chloroaniline)
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde)
Orthochloroparanitroanilin (see 2-Chloro-4-nitroaniline)
Orthochlorophenol (see o-Chlorophenol)
Orthocresol (see o-Cresol)
Orthodichlorobenzene (see o-Dichlorobenzene)
Orthonitroanilin (see o-Nitroaniline)
Orthonitrochlorobenzene (see o-Nitrochlorobenzene)
Orthonitrobiphenyl (see o-Nitrobiphenyl)
Orthonitroparachlorophenol (see 2-Nitro-4-chlorophenol)
Orthonitrophenol (see o-Nitrophenol)
Orthonitrotoluene (see o-Nitrotoluene)
Orthophenetidin (see o-Phenetidine)
Orthophenylphenol (see o-Phenylphenol)
Ortho-tertiary-amylphenol (see o-tert-Amylphenol)
Orthotolidin (see o-Tolidine base)
Orthotoluidin (see o-Toluidine)
Osage orange cryst, No 1 bbls, l.c.l. lb 40 - —
extract liq, No 1 bbls, l.c.l., lb 19 —
Ouabain USP bots gram 3.00 4.00
Oxyquinolin sulfate ens, 100-lb lots, works lb 4.75 5.00
smaller lots works lb 4.92 5.17

P

Papain USP African bots lb 3.50 4.00
Ceylon lb 3.00 3.50
Papaverine, nat or syn hydrochloride USP ens., 25-oz to 100-oz lots oz 5.00 —
smaller lots oz 5.05 5.20
Sulfate ens oz 7.10 7.35
Paprika Roumanian bgs lb 26 —
Spanish, bgs lb. 60 - —
Yugoslavian, bgs lb. 35 - —
Para aminophenol (see p-Aminophenol)
Para-anisidin (see p-Anisidine)
Parachloro ortnonitroanilin (see 4-Chloro-2-nitroaniline)
Parachloranilin (see p-Chloraniline)
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde)
Parachlorophenol (see p-Chlorophenol)
Paracresol (see p-Cresol)
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Paraffin crude scale white, 123°-127°F ASTM tanks refy, lb. .0710- —
fully refd, 122°-124°F, ASTM, tanks, refy lb. .0815- —
125°-127°F, ASTM, tanks, refy lb. .0815- —
130°-132°F, ASTM, tanks, refy lb. .0815- —
132°-134°F, ASTM, tanks, refy lb. .0815- —
135°-137°F, ASTM, tanks, refy lb. .0815- —

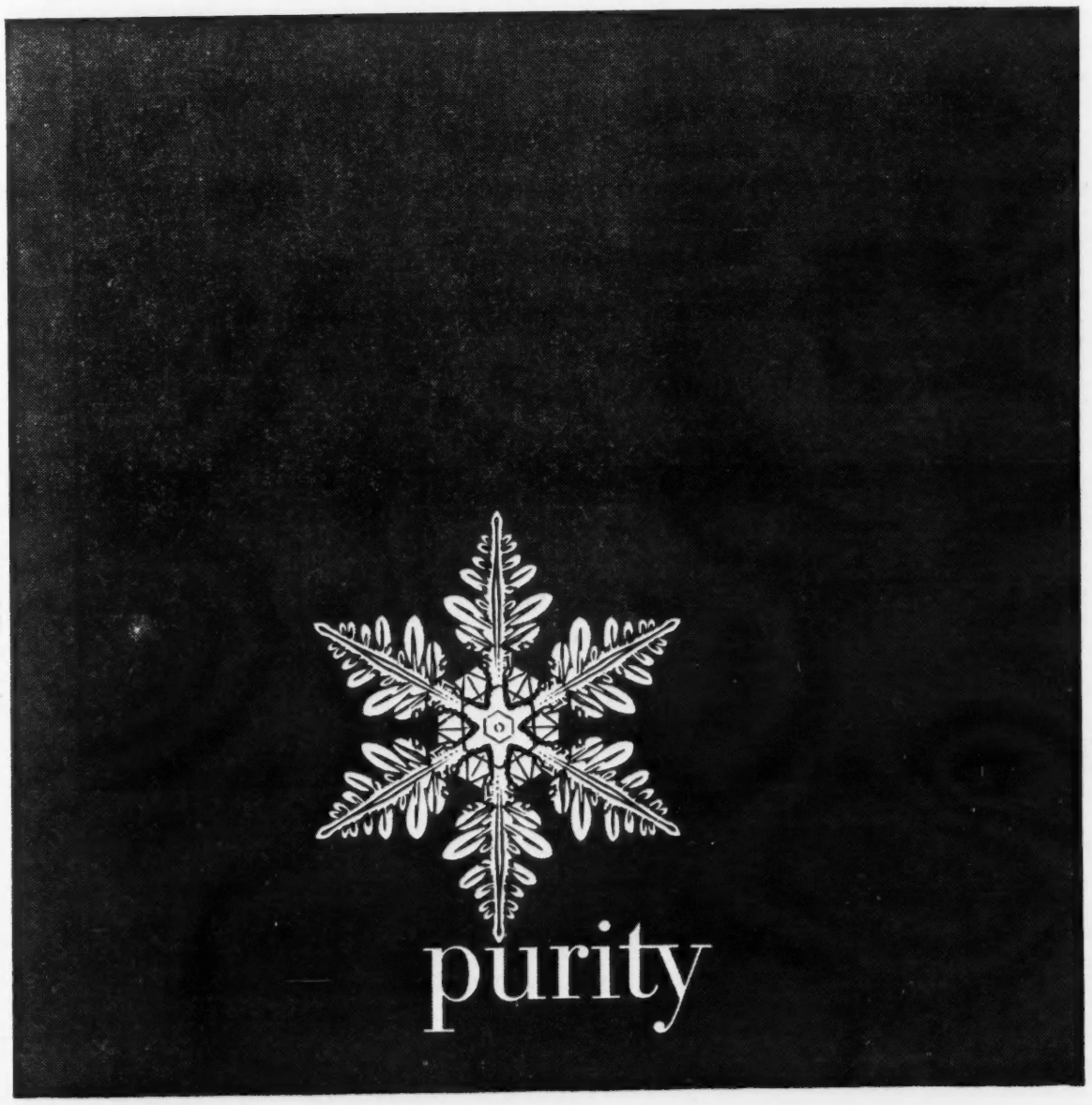
AMP temperatures are an arbitrary 3°F higher than ASTM

Paraformaldehyde 91% flake, bgs., c.l. frt. alld lb. .11¼- —
l.c.l., frt. alld lb. .13¼- .14¼
powd., bgs., c.l., ex whse lb. .167 - —
l.c.l. ex whse lb. .182 - —
USP, X, fib dms., c.l. lb. .19 - —
1,000-lb. lots lb. .20 - —
smaller lots lb. .21½- —
Paraldehyde tech., 98%, 55-gal. dms., c.l., works lb. .14 - —
l.c.l., works lb. .15 - —
tanks, works lb. .11½- —
Paranitroanilin (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene)
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol)
Paraphenetidin (see p-Phenetidine)
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol)
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion spray powder, 15%, dealers, bgs., dms, frt. alld lb. .50 .53
tech., dms., c.l., t.l., works lb 1.3395- —
l.c.l., works lb 1.51 —
Paratoluenesulphonamide (see p-Toluenesulfonamide)
Paris green, dealer dms., c.l., frt. alld lb. .44 - .47
l.c.l., same basis lb. .45 - .48
Passion flower herb, bls. lb. .25 - —
Peanut meal 45% old process, bgs., mills ton 52.50 - —
Pectin, citrus, NF, powd. bbls lb 2.05 2.06
tech., powd., bbls. lb. 1.55 - —
imported, Danish, ex whse lb. 1.28 - —
Penicillin, crystalline potassium, bulk 1,000,000 units. .0325- .0550
Procaine, bulk 1,000,000 units. .0325- .0550
Sodium, bulk 1,000,000 units. .0623- .0650
Pentachlorophenol, dms., c.l., t.l., works, frt. equald lb. .22 - —
l.c.l., same basis lb. .23½- .30
Pentaerythritol tech., bgs., c.l., works lb. .32 - —
l.c.l., works lb. .33 - —
Di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol)
Pentane, indust., tanks, Tex. refy. gal. .13 —
Pepper, black, Malabar, spot bgs. lb. .28½- —
red, Gondar, spot bgs. lb. No prices.
Japanese, hontaka bgs lb. .34 - —
birdseyes bgs new crop lb. No prices.
Mombasa, bgs., shipt lb. .56 - .57
Nigerian, bgs lb. .42 - —
Turkish, bgs. lb. .28 - —
white, bgs lb. .35 - .36
Peppermint leaves, USP dom., bls., dms lb. .70 - .75
imp., bls lb. .85 - —
Perchloroethylene, dms., c.l., or truckloads, dlvd lb. .13 - —
l.c.l., dlvd. lb. .14½- —
tanktruck, 1,000 gal., min. dlvd lb. .12 - —
tanks dlvd lb. .11½- —
Peru balsam, dms lb. 1.35 - —
Petrolatum, extra amber, dms., c.l., refy. lb. .06½- —
l.c.l., dlvd lb. .06¼- —
tanks, refy. lb. .04¼- —
cream, dms., c.l., refy lb. .07½- —
l.c.l., dlvd. lb. .09¾- —
tanks, refy. lb. .05¼- —
USP, white, lily, dms., c.l., refy. lb. .07½- —
l.c.l., dlvd lb. .10¼- —
tanks, refy lb. .05¾- —
snow, dms., c.l., refy lb. .08¾- —
l.c.l., dlvd lb. .10¾- —
tanks, refy lb. .06¼- —
yellow, soft, dms., c.l., refy lb. .06½- —
l.c.l., dlvd lb. .08¾- —
tanks, refy lb. .04¼- —

Petroleum, lacquer diluent, 150°-240°F, b.r., tanks, West Coast, ex tax, Los Angeles, gal. .169 - .204
East coast, N. J., N. Y. gal. .19 - —
Group 3, benzol-type gal. .14125- .14625
toluol-type gal. .13125- .13375
Mineral spirits, reg, tanks, Calif., ex tax San Francisco gal. .164 - —
East coast, N.J., N.Y gal. .17 - —
Group 3 gal. .11875- —
tankwagon, Boston gal. .19 - —
Buffalo gal. .195 - —
Chicago gal. .279 - —
Cleveland gal. .22 - —
Newark gal. .18 - —
New York gal. .18 - —
Philadelphia gal. .185 - —
Pittsburgh gal. .18 - —
Providence gal. .195 - —
odorless, tanks, refy., Watson, Cal gal. .245 - —
Borger, Tex gal. .24 - —
Houston, Tex gal. .24 - —
Wood River, Ill. gal. .2625- —
N. J. dlvd gal. .32 - —
N. Y., dlvd gal. .33½- —
tankwagon, N. J., dlvd gal. .36 - —
N. Y., dlvd gal. .37 - —
Naphtha, cleaners, tanks, East Coast, N. J., and N. Y. gal. .17 - —
Group 3 gal. .12875- —
tankwagon, Newark gal. .18 - —
New York gal. .18 - —
Philadelphia gal. .185 - —
High solvency (see Petroleum solvent, partial aromatic).
VM&P, 225°-300°F., b.r. tanks, West Coast, Los Angeles gal. .169 - —
Portland, Ore gal. .175 - —
San Francisco gal. .174 - —
Seattle, Wash gal. .175 - —

Petroleum naphtha, VM&P, 225°-300°F b.r., tanks, East Coast, N.J. and N. Y. gal. .18 - —
Group 3 gal. .12875- —
Petroleum naphtha, VM&P, 225°-300°F, b.r., tankwagon Boston, gal. .205 - —
Chicago gal. .289 - —
Cleveland gal. .23 - —
Newark gal. .195 - —
New York gal. .195 - —
Philadelphia gal. .20 - —
Pittsburgh gal. .19 - —
Solvent, partial aromatic, tanks, 205°-282°F., b.r., 41°C., m.a.p., N. Y., N. J gal. .245 - —
212°-278°F b.r. 43°C m.a.p., N. J gal. .26 - —
212°-284°F b.r. 19°C m.a.p., N. J gal. .29 - —
224°-280°F. b.r., 48°C. m.p.a., Houston gal. .215 - —
273°-361°F., b.r., 29°C., m.a.p., N. J gal. .29 - —
282°-325°F b.r., 41.5°C m.a.p. Houston gal. .25 - —
287°-386°F. b.r. 31°C. m.a.p., N. J gal. .29 - —
310°-314°F., b.r., 13.5°C., m.a.p., Texas City gal. .33 - —
310°-348° b.r., 17°C. m.a.p., N. Y., N. J gal. .35 - —
320°-360°F., b.r., 16°C. m.a.p., N. Y. N. J gal. .33 - —
324°-349°F., 37°C., m.a.p., Houston gal. .33 - —
341°-390°F., b.r., 35°C., m.a.p., N. J gal. .27 - —

Petroleum solvent, partial aromatic, tanks, 352°-413°F., b.r., 30°C., m.a.p. Houston gal. .33 - —
358°-401°F., b.r., 25°C., m.a.p., N. Y., N. J gal. .39 —
364°-404°F b.r. 19°C m.a.p., N. Y., N. J gal. .425 —
367°-418°F b.r. 19.6°C m.a.p. N. Y. N. J gal. .33 —
Rubber, tanks, Cal., ex tax, San Francisco gal. .173 - —
East Coast N. J. N. Y. gal. .18 —
Group 3 gal. .12875- —
Stoddard, tanks, East Coast, N. J., N. Y. gal. .17 - —
Group 3 gal. .12375- —
Pennsylvania, western gal. .15 —
tankwagon, Boston gal. .19 - —
Chicago gal. .255 —
Cleveland gal. .22 - —
Los Angeles, ex tax gal. .194 - —
Newark gal. .18 - —
New York gal. .18 - —
Philadelphia gal. .185 —
Pittsburgh gal. .18 —
Sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works lb. .16½- .18¾
t.c.l. works lb. .17½ .19
tanks, works lb. .14½ .17
50-55% sulfonic content, non-ret, dms, c.l. works lb. .16 —
t.c.l. works lb. .17 —
tanks, works lb. .13 - —
o-Phenetidine, dms, t.l., frt alld, E lb .91 - —
t.c.l., same basis lb .93 - —



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p-Phenetidine, dms., c.l., frt. alld. lb. 1.00 - —
l.c.l., same basis lb 1.03 - —
Phenobarbitol, USP, dms., 100-lb. lots lb. 3.25 - —
Phenobarbital-sodium, USP, dms., 100-lb. lots lb. 3.25 - —
Phenol 90-92% (cresol 8-10%), non-ret. dms. c.l. frt alld E. of Rockies lb. 17¾ .18
l.c.l. same basis lb. .18¼ .19
tanks, same basis lb .16 —
82-84% (cresol 16-18%), non-ret. dms., c.l., same basis lb. .17½ —
l.c.l. same basis lb. .18½ —
tanks, same basis lb. .15½ —
39°C or above, tar distilled, non-ret dms. c.l same basis. lb. .19¼ .19½
l.c.l same basis lb. .19¾ .20½
tanks, same basis lb. .17½ —
USP syn., dms. c.l. t.l., frt. alld lb 20 - —
l.c.l. same basis lb 22 - —
tanks, same basis lb. 18 - —
Phenolphthalein, USP or yellow, bbls. dms. 2,000-lb lots. lb. 1.15 - —
smaller lots lb. 1.17 - 1.22
Phenothiazine, NF, fib. dms., c.l., frt. adjusted lb 39 - —
over 2,100 lbs. same basis lb 41 - —
less than 2,100 lbs. same basis. lb 43 - —
Phenyl acetate, dms., 100-lb. lots, works lb 50 - —
Salicylate (see Salol.)

Phenylacetaldehyde, soln., 50%, bots lb. 2.40 2.70
100% bots lb. 4.00 4.65
dl-Phenylalanine, dms., works lb.27.00 -37.50
l-Phenyl-3-carbethoxy pyrazolone-5, 200-lb. fib. dms., dlvd. E lb. 3.45 - —
smaller dms., dlvd. E lb. 3.80 - —
N-Phenyldiethanolamine dms., c.l., dlvd. E lb. 40½ - —
l.c.l. dlvd E lb. 41¼ - —
tanks, dlvd. E lb. 38½ - —
m-Phenylenediamine dms. frt alld. lb. 95 - —
o-Phenylenediamine, coml., 100 to 1,000 lbs., fib. dms., works lb 1.70 1.80
o-Phenylenediamine, refd., tech., dms., works lb 1.42 - —
Phenylethanolamine, d m s., c.l., works lb. 75½ - —
l.c.l., same basis lb 76 - —
Phenylethyl acetate, bots lb. 1.25 1.60
Phenylhydrazine base CP bots lb 3.00 3.07
Hydrochloride coml. kgs. works lb 1.75 - —
purif., bots., works lb 5.17 - —
l-Phenyl-3-methyl pyrazolone-5 250-lb lots, dlvd E lb 1.80 - —
smaller lots, dlivd. E lb. 2.10 - —
Phenylethylphenyl acetate, bots lb 4.15 4.35
o-Phenylphenol, dms. l.c.l. works. lb .42 .44
p-Phenylphenol, bgs., c.l., works lb. .37 - —
l.c.l., works lb. .41½ - —

Phloroglucinol, coml., fib. dms., works lb. 6.40 - —
C.P., bots., works lb.17.75 - —
tech., fib. drums., works lb.10.45 - —
Phosphate, defluorinated (see under D).
Rock, Curacao, Atlantic ports, New Orleans ton.48.00 - —
Florida, land pebble, run-of-mine, washed, dried unground, bulk, c.l., mines, 68-66%, b.p.l., bulk, c.l., mines long-ton. 4.94 - 4.99
70-68%, b.p.l., c.l., same basis long-ton. 5.34 - 5.39
72-70%, b.p.l., c.l., same basis long-ton. 5.99 - —
75-74%, b.p.l., c.l., same basis long-ton. 6.99 - —
78-76%, b.p.l., c.l., same basis long-ton. 7.99 - —
The Florida prices (above) are based on fuel oil at $2.47 per bbl. and labor at $1.43. Recent oil advance currently absorbed.
Phosphorus, amorph, red dms., t.l., works lb. .48 - —
smaller lots, works lb. .49 - .50
white (yellow), solid, dms., c.l., works, frt. equald lb. .20 - .20½
l.c.l., works, frt equald. lb. .21½ - —
tanks works, frt equald. lb. .19 - —
Oxychloride, dms., c.l., works lb. .14 - —
l.c.l., works lb. .15 - —
tanks, works lb. .12½ - —
Pentasulfide, solid, dms., c.l., works lb. .11½ - —
l.c.l. works lb. .12½ - —
Pentoxide, dms., c.l., works lb. .1395- .1450
l.c.l., works lb. .1695- .1750
Sesquisulfide, tins, cs., c.l., works. lb. .38 - —
l.c.l., works lb. .39 - .40

Phosphorus trichloride, dms., c.l., works lb. .14 - —
l.c.l., works lb. .15 - —
tankcars, works lb. .12½ - —
Phthalic anhydride, bgs., c.l., works, frt. equald lb. .21 - —
l.c.l., same basis lb. .22 - —
tanks, same basis lb. .20½ - —
Phthalimide, 97%-98%, dms., frt. equald lb. .65 - —
Phthalylsulfacetamide, 1,000-lb. lots or more lb. 5.00 - —
NF lb. 5.20 - —
a-Picoline, ret. dms., c.l., works, frt. equald lb. .43 - .43½
l.c.l., works, frt. equald lb. .44 - —
tanks, same basis lb. .415 - .423
b,g-Picoline, 5°C. dms., c.l., works. lb. .32½ - —
l.c.l., works lb. .33 - —
g-Picoline, 98% dms., works lb. 2.00 - —
Pilocarpine hydrochloride, USP, bots oz. 4.75 - 5.25
Nitrate, USP bots., vials oz. 4.65 4.75
Pimento, Jamaican, bgs lb. .72 - —
Mexican, bgs lb. .36 - —
Pink root, bls lb. 2.50 - —
Piperazine, crude, dms., c.l., works. lb. 3.00 - —
l.c.l., works lb. 3.05 - —
Hexahydrate, French Codex, bots. kilo. 8.00 - 8.50
Piperidine dist. dms. frt equald lb 2.60 2.70
Piperonyl butoxide, dms. dlvd E. lb 4.50 5.05
Cyclonene, dms., dlvd. E lb. 3.70 - 4.25
Pitch, coaltar, bulk, aluminum, works ton.40.00 -42.00
carbon and industrial, works. ton.40.00 - —
core, works ton.36.50 - —
fiber, works ton.44.00 - —
roofing, 140-155°F., Fed. Spec. RP-381, Type I, tanks, works ton.39.00 - —
Cottonseed raw, dms. works lb. .03 - .03¼
tanks, same basis lb. .02¾ - —
Linseed, dms lb. .06 - .06¾
Marine, dms lb. .04¼ - .05
Petroleum (see Asphalt, petroleum).
Soybean, dms., works lb. .05 - .05½
Tall, dms., c.l., works ton.50.00 -70.00
tanks, works ton.30.00 -40.00
Plaster of Paris (see Gypsum).
Platinum metal, works oz.105.00 -107.00
Pleurisy root, bls lb 45 50
Podophyllum resin, NF, dms. lb.15.60 -16.10
Poke root, bls lb 19 .22
Polymyxin, bulk, bots., dms., 50 billion units or more, 1,000,000 units. .53 - —
25-50 billion units 1,000,000 units. .54 - —
1-25 billion units 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate, dms. 20,000-lb. lots, works lb. .41 - —
10,000-20,000-lb lots works. lb. .43 - —
smaller lots works lb. .46 - .48
Tristearate, dms., 20,000-lb. lots, works lb. .41 - —
10,000-20,000 lb lots works. lb. .43 - —
smaller lots works lb. .46 - .48
Poppy seed, Argentine, bgs lb. .24 - —
Dutch, bgs lb. .28 - —
Iranian, bgs lb. .14½ - .15
Polish, bgs lb. .27½ - —
Turkish, bgs lb. .24 - —
Potash caustic reg., flake, 88-92% dms., c.l., works 100 lbs 9.15 - —
l.c.l., works 100 lbs.10.20 - —
liq., 45% basis, dms., c.l., works 100 lbs. 4.25 - —
l.c.l., same basis 100 lbs 5.05 - —
tanks, same basis 100 lbs 3.70 - —
solid, 88-92%, dms., c.l., works. 100 lbs. 8.70 - —
l.c.l., works 100 lbs. 9.75 - —
Potassium acetate, NF dms lb .31 - .36
Bicarbonate, USP, gran., dms lb. .22 - —
powd. dms lb. .24 - —
Bichromate, gran., bgs., c.l., t.l., works lb. .18 - —
l.c.l., works lb. .18½ - 19¾
Potassium bichromate in dms. ¾c. higher.
Bitartrate, NF, dom., gran. or powd., bbls. 5,000 lbs., 1 ship't lb. .40½ - —
dms., c.l lb. .40 - —
smaller lots lb. .41 - .43
imp., kgs lb. .32 - .35
Bromate dms. 1,000 lbs. or more. lb. .50 - —
25-200-lb lots lb. .52 - .62
Bromide, USP, gran., bbls., kgs. lb. .37 - .38
Carbonate, NF, gran., bbls., dms. lb. .20 - —
powd. bbls., dms lb. .21 - .22
tech., calcined, bbls., c.l., works. 100 lbs. 9.00 - —
l.c.l., same basis 100 lbs.10.05 - —
hydrated, 83-85%, bbls., c.l., works 100 lbs. 7.60 - —
l.c.l., works 100 lbs 8.65 - —
Chlorate cryst., dms., c.l., works. lb. .11¼ - —
l.c.l., works lb. .11½ - .12¼
powd., dms., c.l., works lb. .11¾ - —
l.c.l., works lb. .12 - .13
NF, gran., 25-lb. metal dms lb. .36 - —
Chloride, agricultural (see Potassium muriate).
indust. 99.9% KCl, bulk, c.l., works ton.29.00 - —
bgs., c.l., works ton.33.50 - —
99.3% KCl, bulk, c.l., works ton.27.00 - —
bgs., c.l., works ton.31.50 - —
USP, cryst., dms lb. .21 - .23
gran., dms lb. .15 - .17
powd. dms lb. .24 - .26
Chromate, tech., bgs lb. .50 - .50½
Citrate, USP, gran., dms lb. .43 - —
powd., dms lb. .40½ - .41¼
Cyanide dms., 20,000-lb. lots or more, works lb. .45 - —
2,000-19,999-lb. lots, works lb. .455 - —
smaller lots, works lb. .465 - —
Dichromate (see Potassium bichromate)
Ferricyanide, dms., ton lots, works. lb. .50 - —
smaller lots, works lb. .65 - —
Ferrocyanide, bgs., ton lots lb. .23 - —
smaller lots lb. .23½ - —
Fluoborate fib dms., c.l., works lb. .30 - —
l.c.l. works lb. .31 - —
Fluoride, dms., works lb. .37 - .38
Gluconate, dms lb. 1.62 - —
Guaiacolsulfonate, NF, dms lb. 2.10 - 2.30
Hydroxide, tech. (see Potash caustic).
USP pellets 100-lb. dms. 1 to 100-dm. lots lb. .33½ - .38
Hypophosphite, NF, fib. dms., 1,000-lb. lots lb. 1.38 - —
Iodide, dms lb 1.90 - 1.95
Manure salt, 22% K_2O, bulk, c.l., works unit-ton. .17 - .1765
Metabisulfite, gran., dms. lb. .20 - .21
powd., dms lb. .25 - —
Muriate, standard and granular, 59-63% K_2O, bulk, c.l., works, base price, unit-ton. .36 - —
July forward unit-ton. .38 - —
granular, 60-63% K_2O, bgs., c.l. works, base price ton.26.25 - —
July forward ton.27.45 - —

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when you preserve with PARASEPTS

Here is your solution to the problem of *safe* and effective preservation of products vulnerable to fungal and bacterial attack. By preventing the growth of such microorganisms, Heyden Parasepts eliminate costly breakdown, resultant malodor and discoloration of your product.

Harmless and non-irritating to the skin, the Parasepts find wide use in creams, lotions and other cosmetics; also in finger paints, tooth pastes and antibiotics where a low level of toxicity is required.

As non-ionic, neutral esters, Parasepts may be used in combination with other preservatives to achieve protection with maximum safety.

You will benefit from these outstanding advantages of the Parasepts:

- **Colorless, odorless and tasteless in recommended concentrations.**
- **Non-irritating to skin; extremely low toxicity.**
- **Economical—effective in low concentrations.**

Heyden offers Methyl, Ethyl, Propyl, and Butyl Parasepts in purified and technical grades to meet your specific requirements.

Write for Bulletin PSPT-1 and detailed technical information.

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Prepared by U. S. Industrial Chemicals Co.

U.S.I. CHEMICAL NEWS

Jan. ★ A Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1957

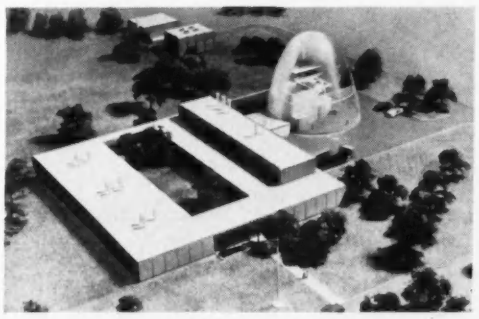
Nuclear Reactor Planned By U.S.I. and 9 Others For Industrial Research

A privately owned nuclear reactor for industrial research will be built and operated at Plainsboro, N. J. by a new company, Industrial Reactor Laboratories, Inc., formed by U.S.I. Division of National Distillers and 9 other companies.

U.S.I.'s participation in this new undertaking is one more step in its expanding research program. There are many possible avenues of research open. For example, radiation techniques provide new variations in the properties of polyethylene. The company is an important producer of polyethylene and plans to use the new reactor for the study of radiation techniques and effects on the resin.

Many chemical reactions may be energized or modified by the use of nuclear radiation.

MORE



Model of the Industrial Reactor Laboratories research reactor to be built by 10 participating companies, including U.S.I. The reactor is the dome-shaped structure while the building in the foreground will house individual laboratories of the participating companies.

Greenleaf to Handle Market Development of Zirconium And Titanium for U.S.I.

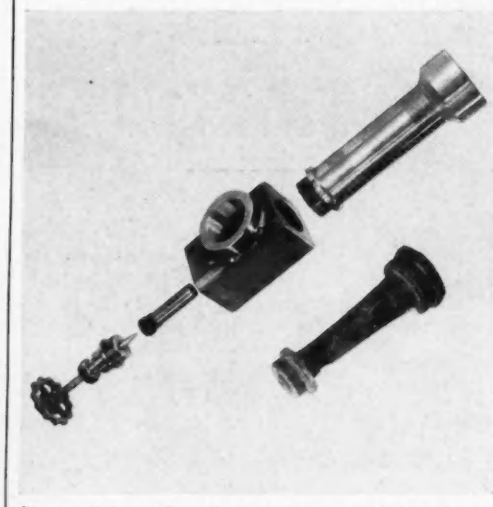
William C. Greenleaf has been named Manager of Metals Development for U.S.I. and will be responsible for market development and sales of zirconium and titanium sponge, to be produced from U.S.I.'s two new plants now being built in Ashtabula, Ohio.

A recognized authority in the field of zirconium and titanium, Mr. Greenleaf presented three papers during the 1955 Atomic Industrial Forum Zirconium Program, describing (1) melting of zirconium, (2) fabrication of zirconium, and (3) zirconium mill products and prices. He also conceived and developed processes now in general use for producing both wide-sheet and flat-bar titanium and zirconium by continuous strip-mill techniques.

Zirconium and Titanium Lick Roughest Corrosion Problems

Metals to be Available at Lower Cost in Future; Provide Long-Lived Materials of Construction; Complement Each Other on Corrosion Resistance

It is now practical to fabricate equipment which is *corrosion-resistant to almost every substance encountered in industry*, by using either zirconium or titanium metal. Alloys of either metal, or possibly both, may extend the range even further.



Steam jet made of zirconium, at left, gives trouble-free performance after a year in hydrochloric acid service. At right, throatpiece from steam jet, made of cast iron, looks like this after one week in hydrochloric acid service.

To date titanium has been used principally in aircraft construction, where its high strength-to-weight ratio offers great advantages. And zirconium has been developed primarily for atomic energy work as a strong and corrosion-resistant metal with desirable nuclear properties. The demand for titanium and zirconium created by these applications has greatly accelerated the production capacity and fabrication technology of these "new" materials of construction, making them available to the chemical industry in a short time and at a reasonable price.

Supply Increasing in 1957

Industrial applications of these metals have been hampered by two considerations: availability and price. Zirconium will shortly be produced at a rate sufficient to supply industrial needs, and titanium has been available to industry during the past two years. And it is expected that increased production of these metals during the next few years will result in significant price decreases.

MORE

Typical Corrosion Resistances* of Zirconium and Titanium

Corrosive Media	Metal Resistance	
	Zirconium	Titanium
Sulfuric Acid	excellent to good below 80%	good below 5%
Nitric Acid	excellent	excellent
Hydrochloric Acid	excellent	good below 10%
Phosphoric Acid	excellent to fair below 85%	poor
Chromic Acid	excellent	excellent to good
Aqua Regia	poor	excellent
Wet Chlorine Gas	poor	excellent
Chlorine Water	excellent	excellent
Sodium Hydroxide	good below 90%	good below 50%
Ferric Chloride	poor	excellent
Calcium Chloride	excellent	excellent
Cupric Chloride	poor	excellent
Sodium Chloride	excellent	excellent
Ammonium Chloride	excellent	excellent
Aluminum Chloride	excellent	excellent to fair

*Above data do not cover all conditions because of space limitations. Literature references may be obtained by writing the Editor, U.S.I. Chemical News, 99 Park Ave., N. Y. 16, N. Y.

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Jan. ★ # U.S.I. CHEMICAL NEWS ★ 1957

CONTINUED

Corrosion

Twelve to thirteen thousand tons of titanium were available in 1956 and present construction schedules indicate that the figure will rise substantially in 1957. U.S.I.'s new plant alone will add 5,000 tons to the annual production capacity by the end of the year. Zirconium will be on the market in quantity by mid-1957. When its new plant at Ashtabula, Ohio gets under way, U.S.I. will be able to supply 500,000 pounds or more per year to commercial users in addition to its Atomic Energy Commission commitments of 1,000,000 pounds per year.

New Metals Economical

Chemical process equipment can now be fabricated from titanium for a little over twice the price of stainless steel, and it is expected that in the future titanium equipment will be only 50-75% higher than stainless. Commercial grade zirconium equipment will probably be priced only 75-100% higher than stainless when volume production is reached.

Several other factors combine to make zirconium and titanium economical as corrosion-resistant materials of construction. For many of the more difficult-to-handle chemicals, especially chlorides and oxidizing acids, equipment fabricated from these metals can have extremely long service life. Product contamination can be virtually eliminated in chemical and food handling processes.

Corrosion resistances of zirconium and titanium to typical chemicals are presented in the chart on page 1.

Methionine Increases Protein Utilization Of Dried Fish Meal

Supplementation of commercial fish meal with DL-methionine, an essential sulfur-containing amino acid, raises significantly the net protein utilization of the meal, according to a report recently published in England.

During the drying process, the action of heat in the presence of moisture is said to impair the protein quality of fish meal. Methionine becomes the chief limiting amino acid, and increasing the methionine content of the fish meal through supplementation restores most of the protein value of the meal.

CONTINUED

Reactor

U.S.I. plans to look into new and more efficient processes for the production of a wide variety of chemicals through research at the proposed installation.

Participation in the project will also enable U.S.I. to make further studies on materials for nuclear reactors. The company is a major producer of metallic sodium, used as a heat transfer medium for certain types of reactors.

And zirconium will be produced by U.S.I. in the near future under a contract with the Atomic Energy Commission. Zirconium is a key structural material for atomic reactors and a raw material for the production of reactor fuel elements. The company is vitally interested in developing still other materials and chemicals used in the generation of atomic power.

Faye Named Manager of Sodium Product Sales

Martin Faye has been named Manager of Sodium Product Sales for U.S.I. and will be responsible for coordinating sales and sales promotional activities for metallic sodium, "U.S.I. Isosebacic" acid and related products.

Mr. Faye joined the U.S.I.-National Distillers organization in 1952 in the Market Research and Development Department, where he was responsible for commercial development of "U.S.I. Isosebacic" acid. "U.S.I. Isosebacic" is the registered trade mark for a mixture of 10-carbon dibasic acids produced synthetically for the first time by a U.S.I.-developed process. A 10,000,000 pound-per-year plant to produce this material is under construction at U.S.I.'s Tuscola, Illinois plant site, and is expected to be in operation by mid-1957.

TECHNICAL DEVELOPMENTS

Information about manufacturers of these items may be obtained by writing the Editor, U.S.I. Chemical News.

Polyethylene "pillows" to retard evaporation of liquids in open tanks and vessels are now being produced. They are air-filled, 5/8" by 1¼" by ½" in size. A 1½" layer is claimed adequate for solutions at any concentration. **No. 1190**

Monomethylol dimethyl hydantoin, now produced commercially, is offered as an almost odorless donor of formaldehyde and for reaction as a substituted hydantoin. Contains 19% combined formaldehyde capable of liberation **No. 1191**

New alkaline scale and oxide remover for iron and steel is said to act electrolytically for rapid removal without chemical attack. Recommended for plating lines and automatic equipment involving alkaline solutions. **No. 1192**

A zirconium-copper alloy now available is reported to combine high electrical conductivity with good strength retention at elevated temperatures. Suggested for electrical motor commutators serving above 500°F where strength is needed. Conductivity is 95.8% of copper. **No.1193**

Fire protection for chemicals is discussed in a new 152-page book which can be purchased by those interested in the subject. Chemical hazards are analyzed, and methods of fire prevention and fire fighting are covered. **No. 1194**

A new cellulose derivative dissolves readily in cold water and is suggested for use as a thickener, emulsifier, adhesive and binder. The material is an ethyl-hydroxyethyl cellulose. Solutions are claimed to resist mold. **No. 1195**

A dye for photographic emulsions has just been synthesized which extends their sensitivity far into the infrared. Known as thiahexacarbocyanine, the dye has its absorption maximum at 1140 millimicrons. **No. 1196**

Titanium wire cloth is now on the market in sizes from 60 mesh to coarser grades. It is reported to be particularly suitable for filtering or screening highly corrosive materials. **No. 1197**

A new material for standardizing acids directly in one step is now available to laboratory workers. It is tris (hydroxymethyl)- amino-methane, reported to eliminate the usual acid vs. base, base vs. phthalate procedure. **No. 1198**

Glycerine, its commercial grades, specifications, test methods, shipping and storage requirements, is described in a 19-page booklet just issued. A 17-page booklet on properties and uses of glycerine is also available. **No. 1199**

PRODUCTS OF U.S.I.

INORGANIC CHEMICALS:

Sodium, Metallic: cast solid in tank cars, steel drums, pails; bricks in barrels, pails.
Chlorine: liquid, in tank cars.
Caustic Soda: 50% liquid, in tank cars.
Sodium Peroxide: dust-free granules, in drums.
Sulfuric Acid: all strengths, 60° Baumé to 40% Oleum. Also Electrolytic grade to Federal specifications Tank cars or tank wagons.
Ammonia: Anhydrous, commercial and refrigeration. Tank cars or tank wagons. Also Nitrogen Fertilizer Solutions

OTHER PRODUCTS:

Alcohols: Ethyl (pure and all denatured formulas), Normal Butyl, Amyl, Fusel Oil; Proprietary Denatured Alcohol Solvents SOLOX®, FILMEX®, ANSOL® M, ANSOL® PR.

PETROTHENE® Polyethylene Resins.

Esters, Ethers and Ketones: Normal Butyl Acetate, Dibutyl Phthalate, Diethyl Carbonate, Diethyl Oxalate, Ethyl Acetate, Ethyl Ether, Acetone.

Intermediates and Fine Chemicals: Acetoacetarylides, Ethyl Acetoacetate, Ethyl Benzoylacetate, Ethyl Chloroformate, Ethylene, Ethyl Sodium Oxalacetate, Sodium Ethylate solution, Urethan USP (Ethyl Carbamate).

Animal Feed Products: Calcium Pantothenate, Choline Chloride Products, Curbay B-G® 80, Special Liquid Curbay®, DL-Methionine, Niacin USP, Riboflavin Concentrates, Vitamin B_{12} and Antibiotic Feed Supplements, Vacatone® 40, Vitamin A, D_3 and K_3 Products, Antioxidant (BHT) Products.

Pharmaceutical Products: DL-Methionine, N-Acetyl-DL-Methionine, Riboflavin USP, Urethan USP, Intermediates

U.S.I. INDUSTRIAL CHEMICALS CO.
Division of National Distillers Products Corporation
99 Park Avenue, New York 16, N. Y.

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Potassium nitrate, NF, cryst., bbls., 20-ton lots..100 lbs.16.50 - —
smaller lots .....100 lbs.17.50 -18.00
gran., bgs., 20-ton lots..100 lbs. 9.25 - —
smaller lots .....100 lbs.10.50 -11.00
powd., bgs., 20-ton lots..100 lbs.10.25 - —
smaller lots .....100 lbs.11.50 -12.00
Oxalate, neutral, tech., fine gran., bbls., dms lb. .30 - .31
Pentaborate, gran., bgs., c.l., works. ton.191.50 - —
dms., ton lots, ex whse..ton.302.00 - —
smaller lots ex whse...ton.307.00 - —
Powdered potassium pentaborate $10.25 per ton higher
Perchlorate, dms., c.l., works lb. .18½- —
l.c.l., works lb. .19 - .20
Permanganate coml. kgs. works. lb. .26 - .29
USP, dms., works.....lb. .29¼- .31
Persulfate, bbls., c.l. works lb. .16½- —
dms., 5-ton lots, works lb. .18 - —
1-ton lots, works lb. .20 - —
Pyrophosphate tetrabasic, dms., works lb. .15½- .18½
Prussiate red (see Potassium Ferrocyanide).
yellow (see Potassium Ferrocyanide).
Silicate, glass bgs., c.l. works. 100 lbs.17.00 -17.30
t.c.l. works 100 lbs.17.80 - —
soln., clarif. 29° Be, 1:2.5, dms., c.l., works 100 lbs. 5.80 - —
t.c.l. 5 dms. or more works 100-lbs 6.55 6.95
tanks, works 100-lbs 5.45 - —
electrical grade, 29° Be, 1:2.0, dms., c.l., works 100 lbs. 6.50 - —
t.c.l. 5 dms or more, works 100 lbs. 7.25 - 7.65
tanks, works 100 lbs. 6.15 - —
40.5° Be, 1:2.1, dms., c.l., works 100 lbs. 6.45 - —
t.c.l. 5 dms. or more works 100 lbs. 7.20 - 7.60
tanks, works 100 lbs. 6.10 - —
Silicofluoride, bgs., works..... lb. .09½- .10
Potassium silicofluoride in drums 0.4c per lb higher
Stannate, dms., frt. alld. E lb. .784 - .853
Sulfate, agricultural, 50% K_2O, bulk, works, base price. unit-ton. .64 - —
July forward unit-ton. .67 - —
NF VII. cryst. dms .. lb. .31 - .33
gran. dms .... lb. .18½- —
powd., dms..... lb. .16 - .17
Sulfocyanate, NF cryst., (see Potassium thiocyanate)
Thiocyanate NF. cryst., dms lb. .84 - .94
tech., works lb. .77 - .79
Titanate ctns., c.l., works lb. .14 - —
5-ton lots, works lb. .14½- —
1-ton lot or less, works lb. .14¾- —
Toluene sulfonate, dms., c.l., or t.l. works lb. .42 - —
t.c.l. works lb. .46 - —
Potassium-magnesium sulfate bulk, works, basis 40% K_2SO_4, 18% MgO base price ton.13.45 - —
July forward ton.14.00 - —
Potassium-sodium tartrate NF, gran. powd., dms., c.l lb. .42½- —
5,000-lb. lots .... lb. .43 - —
smaller lots .... lb. .45½- .49
Potassium-titanium fluoride, fib. dms, works lb. .39 .40
Potassium-zirconium fluoride, fib. dms, c.l., works lb. .50 - —
t.c.l., works lb. .52½- .55
Pregnenolone, bots. gram. .45 - —
Acetate, bots gram. .40 - —
Procaine hydrochloride, USP, dms., 1,000-lb lots, frt. alld lb 2.83 - —
100-500-lb lots lb. 2.95 3.15
Progesterone USP bots., 100 gram lots gram .50 - —
Acetate, bots. gram .70 - —
Propane, indust. tanks, group 3 gal. .05 - —
N. Y. Harbor .... gal. .093 - —
n-Propyl acetate, dms., c.l., dlvd. lb. .14¼- —
l.c.l., dlvd..... lb. .15¼- —
tanks, dlvd..... lb. .11¾- —
Gallate dms. 100 to 2,000-lb. lots, works lb. 3.90 4.40
p-Hydroxybenzoate, USP, dms lb. 2.30 2.40
Propyl thiouracil bots., 50-kilo lots or more kilo.55.00 - —
smaller lots kilo.55.10 -55.30
Propylene dichloride, dms., c.l., dlvd. E lb. .09½- —
t.c.l. same basis lb. .10½- —
tanks same basis lb .07 - —
Propylene dichloride prices in West 1c higher dlvd. on same basis.
Glycol, indust., dms., c.l., dlvd. E. lb. .16 - —
t.c.l. same basis lb. .17 - —
tanks, same basis lb. .13½- —
USP, dms., c.l., dlvd. E lb. .18 - —
t.c.l., same basis lb. .19 - —
tanks, same basis lb. .15½- —
Methyl ether dms., c.l., dlvd lb. .20 - —
t.c.l. same basis lb. .21 - —
tanks, same basis lb. .18½- —
Oxide, dms., c.l., dlvd. E.....lb. .18 - —
l.c.l., dlvd. E .....lb. .19 - —
tanks, dlvd E .....lb. .16½- —
Psyllium seed, black, bgs..... lb. .28 - .30
blonde, bgs. lb. .18 - —
husks bgs lb. .40 - —
Pumice, dom., grd., coarse to fine, 0 ½ 1 1½ 2 3 bgs., ton lots lb. .03¾- .04¼
smaller lots lb. .03⅞- .04½
Imp., Italian, silk-screen, coarse, bgs., ton lots lb. .06½- —
fine, bgs ton lots lb .04 - —
sun dried coarse, bgs....ton.58.00 - —
fine, bgs .....ton. No Prices
Pumpkin seed, bgs lb .25 .26
Pyrethrin syn (see Allethrin)
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bbls, works lb. .45 - —
powd. 1.3% pyrethrins, obls., works lb. .63 - —
liq. 20/1 basis (2 grams pyrethrins per 100cc odorless base), dms., works gal. 8.75 - 8.85
100/1 basis (10 grams pyrethrins per 100cc odorless base) dms., works gal.41.75 -42.75
oleoresin, dewaxed 20% dms.. works lb.10.00 - —
purif. 20% dms. works lb.10.00 -10.10
Pyridine, denaturing, dms., c.l., works and frt. equald gal 2.77 - —
t.c.l., same basis gal. 2.80 - —
refd. 2° non-ref. dms., t.c.l., same basis lb. .75 - —
Pyridoxine hydrochloride, bots., 100-gram lots gram .37½- —
Pyrites, Canadian works long-ton 3.00 5.00
Pyrocatechol (see Catechol)
Pyrogallol, NF, 100 lb. dms .... lb. 3.50 - —
Pyroxylin scrap, ungrd., amber, dms., works lb. .20 - —
black, dms. works lb. .12 - —
mixed mottled dms. works lb. .13 - —
shavings, amber, cs., works lb. No stocks.
mixed colors, dms., works lb. .11 —
white, china, ivory, dms., works lb. .16 - —
dense opaque dms. works, lb. .12 - .18
translucent pastels, cs., works. lb. .14 - —
colors, dms., works.....lb. .16 - —
USP bots lb 9.50 —

Q

Quassia chips .....lb. .17 - —
Quebracho extract, clarif., grd., 70% tannin, bgs., c.l., lb. .16½- .16¾
liq., 35% tannin, bbls. works. lb. .08¼- .08½
solid, clarif., 64% tannin, bgs., c.l., ex-dock, duty extra lb. .12 23/64
ord. 63% tannin, bgs., c.l., same basis lb. .11 21/32 —
Quercitron extract, cryst., No. 1, bbls., l.c.l. lb. .40 - —
liq., No 1, bbls. l.c.l lb. .19 - —
Quicksilver (see Mercury metal)
Quince seed, bgs ..... lb. 2.00 Nom
Quinidine sulfate, USP, cns., 100-oz. lots oz. .73 .75
Quinine, NF, cns., 100-oz. lots oz. .54 - —
Bisulfate, USP, cns., 100-oz. lots. oz. .37½- —
Hydrochloride, cns., 100-oz. lots.oz. .35 - .47½
Sulfate, USP, cns., 100-oz. lots oz. .29 - .35
Quinoline dms., c.l., frt. equald lb. .50¾- —
l.c.l., same basis.....lb. .51¼- —
tanks, same basis.....lb. .50 - —

R

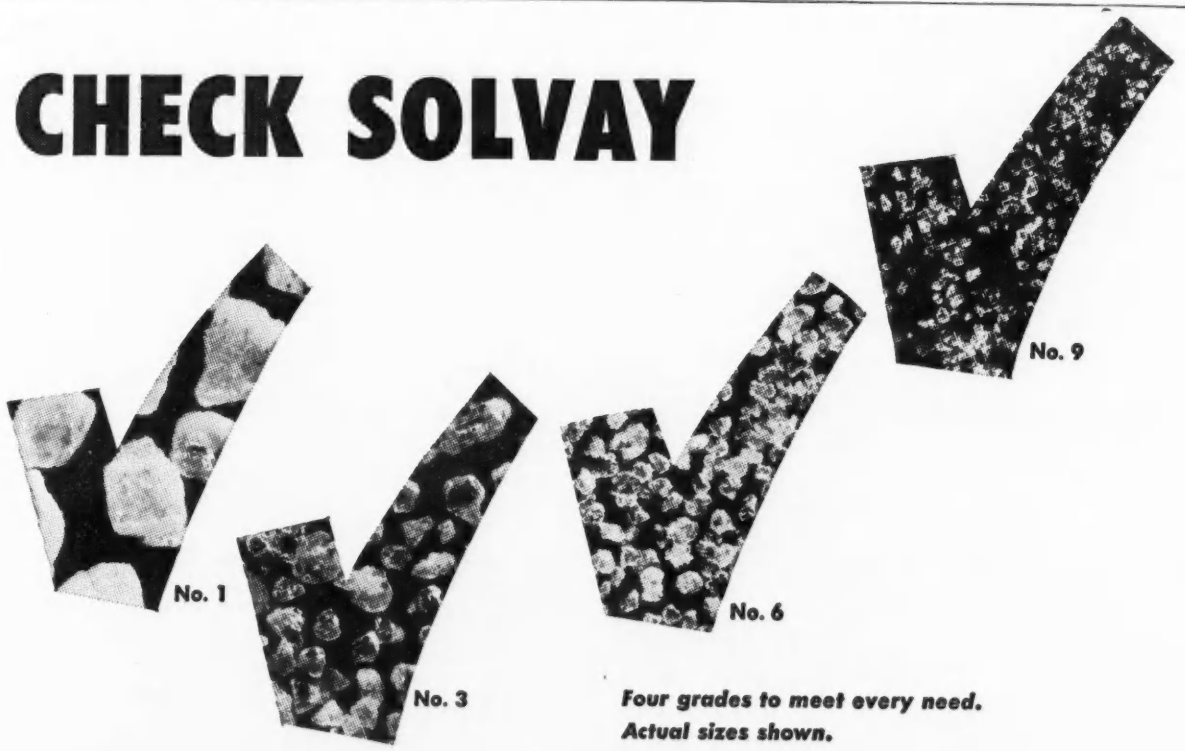
R salt, paste, dms., frt. alld, 100% basis lb .88 - —
powd., frt. alld. 100% basis lb. .98 - —
Rauwolfia serpentina root, powd., bbls., dms lb. 1.75 - —

Potassium Nitrate—Red, Rhodamine

Red, BON acid maroons, pure, bbls., lb 1.75 - —
resinated, bbls lb 1.50 - —
arylid, deep shades, bbls lb. 3.70 - —
light shades, bbls ..... lb. 2.85 - —
maroon, bbls ..... lb. 3.70 - —
Cadmium, CP, dark shade, bbls., frt. alld. E. of Rockies lb. 4.30 - —
light shade bbls. same basis lb. 4.00 - —
medium shade, bbls., same basis lb. 4.25 - —
medium light shade, bbls., same basis lb. 4.05 - —
orange shade, bbls., same basis lb. 3.95 - —
orange red bbls. same basis lb 1.81 - —
Selenide lithopone, maroon shade, bbls., same basis lb. 3.77 - —
dark, bbls., same basis. lb. 3.90 - —
red shade, dark, bbls., same basis lb. 3.44 - —
light, bbls., same basis. lb 2.24 2.33
medium, bbls., same basis. lb. 2.99 - —
medium light, bbls., same basis lb 2.49 - —
Mercury lithopone, dark shade, bbls., same basis lb. 2.40 - —
light shade, bbls., same basis. lb. 1.95 - —
medium shade, bbls., same basis lb. 2.25 - —
medium light shade, bbls., same basis lb. 2.10 - —

Red, carmine No. 40 (see Carmine).
Dyes (see Dyes, coaltar).
Eosin toner, bbls., works.....lb. 1.75 - —
Indian, dom., pure, bgs., Bethlehem Easton E St Louis, N Y lb. 12¾- —
Iron oxide, nat., 75-85% ferric oxide bgs t.c.l. Bethlehem Pa., Copley, O., Easton, Pa., bgs. c.l. works lb. 0675- —
Lake C toner, alizarine, bbls., works lb. 1.20 - —
Lithol toner, bbls., works..... lb. .93 - —
rubine toner pure bbls. works. lb 1.50 —
resinated, bbls., works lb 1.40 —
Virginia type bbls., works lb 1.40 - —
Maroon toner, MNPT kgs., c.l., works lb. 3.80 - —
Mercury oxide, tech. c.l., works. lb. 5.77 - —
Metallic, bbls., c.l., works lb. 02½- —
t.c.l., works lb 02¾ —
Naphthol, ITR, bbls., works...lb. 5.50 - —
Oxide (see Red iron oxide).
Persian Gulf bgs., c.l., works. lb. 07¾- —
t.c.l. works..... lb 08 —
Para toner, bbls .....lb. 1.15 - —
chlorinated, kgs.....lb. 1.30 - —
Phloxin toner (see Red eosin toner)
Rhodamine, molybdated, PMA, kegs lb. 5.80 - —
tungstated, PTMA works, kegs lb. 6.60 - —

CHECK SOLVAY



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DD-1

Red, Spanish oxide, bbls., c.l., ex-dock lb. .05¾- —
t.c.l., ex dock lb 06 —
ex whse. New York lb 06½- —
Toluidine toner, deep shades, kgs., works lb. 1.70 • —
light shades, kgs., works lb. 1.70 • —
Turkey, bbls., works lb .62 • —
Tuscan bbls., frt equald lb 26 .32
Venetian, jobbing, bgs., works, lb. .0475- —
20% bgs., works lb 0525- —
25% bgs., works lb 0575- —
30% bgs., works lb 06 • —
35% bgs., works lb .0625- —
40% bgs., works lb .0675- —
Watchung-type bbls lb 1.95 —
Red KB base (see 4-Chloro-2-aminotoluene).
Red, precipitate (see Mercuric oxide, red)
Red saunders NF powd. bbls lb 35 .40
Reserpine, cryst., bots. gram. 3.00 • —
Resorcinol, tech. grade, dms., c.l., works, frt equald lb 77½- —
t.c.l., same basis lb 78½- —
USP, dms., works lb 2.75 • —
powd., dms., works lb 2.95 • —
Monoacetate NF dms lb 3.00 3.25
Rhatany root bgs lb .15 .16
Rhodinol 5-lb cans lb.32.00 -36.00
Rhubarb root, India, whole, bgs. lb .30 • —
powd., bbls lb .38 • —
Riboflavin USP, bots., dlvd kilo 65.00 • —
readily soluble, bots., dlvd kilo 130.00 • —
5'-phosphate-sodium, bots., 100-kilo lots or more kilo.125.00 • —

Rochelle salt (see Potassium-sodium tartrate).
Roofing pitch (see Pitch, coaltar, roofing)
Rosin gum and wood (see Naval Stores in Protective Coatings market)
Rotenone, fib. dms., works, unit-lb. .12 • —
resin, 25-45% fib dms., works, unit-lb. .12 • —
Rottenstone, bgs. 5-ton lots, ex-whse lb. .03¾- —
ton lots, same basis lb. .04¼- —
Rutin, NF, fib. dms., 10 kilo lots, kilo.17.00 • —
5 kilo lots kilo.17.50 • —
1 kilo kilo.18.50 • —
Ryania, 100% powd. bgs., c.l., works lb. .22 • —
t.c.l. same basis lb .24 • —

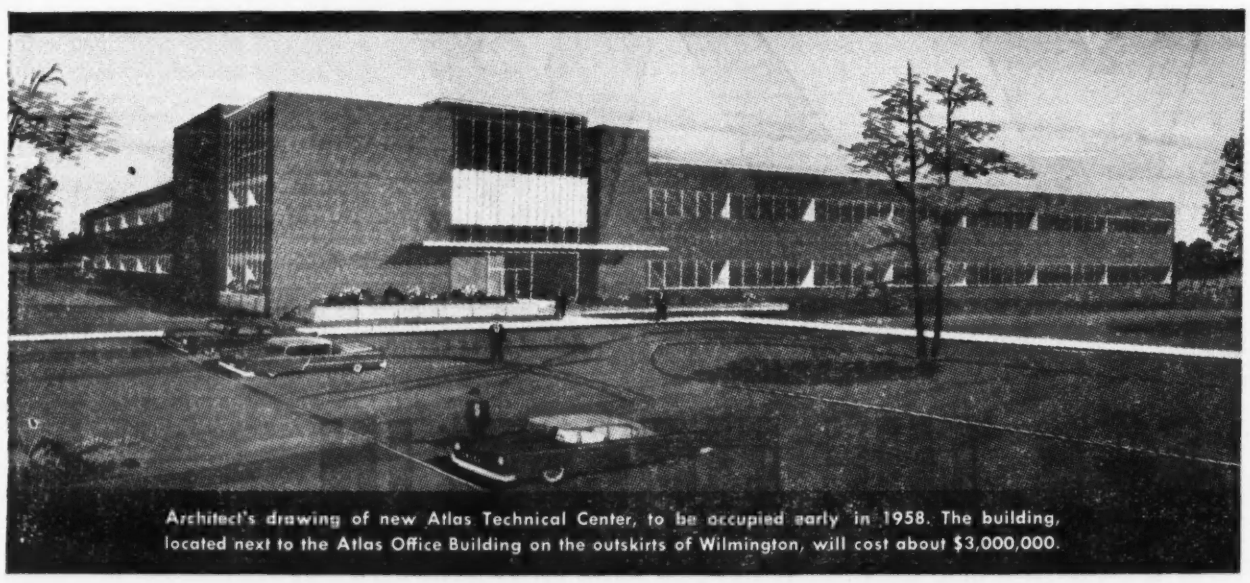
S

Sabadilla seed, powd., bbls lb .49 • 49½
activated, ground with lime, bbls. lb .30 .32
Saccharin USP cryst., soluble, dms., 1000-lb lots lb 1.60 —
smaller lots lb 1.70 1.80
powd., soluble, insoluble, dms., 1,000-lb. lots lb. 1.65 • —
smaller lots lb 1.75 1.95
Calcium, fib dms. 1,000-lb. lots, works lb 2.50 • —
Saffron, Spanish, USP, tins lb.45.00 • —
Safrol, dms lb. .90 • 1.05
Sage, Cretan, bgs. lb. .11 • —
Dalmatian, bgs. lb. .44 • —
Italian lb. .26 Nom.
Sago flour, raw, bgs lb. .07 .07¼
refd., bgs lb. .08½- .09
Sal soda (see Soda sal).
Salicylamide, 100-lb. dms lb. 1.25 • —
Salol, NF, gran., bbls., kgs lb 1.15 • —
Powdered salol 25c higher
Salt, rock, paper bgs., c.l., 100 lbs. 1.04 • —
table vacuum common fine, paper bgs., c.l., 100 lbs. 1.29 • —
Saltcake dom. bulk works, 100% Na_2SO_4 basis ton.28.00 • —
Saltpeter (see Potassium nitrate).
Sandalwood East indies chips bgs. .65 • .66
powd., fib. dms lb 75 • 76
Schaeffer's salt paste, dms., frt. alld. 100% basis lb .95 • —
powd. bgs. frt alld. 100% basis lb .95 • —
Scopolamine hydrobromide, USP bots oz.13.50 -16.50
Seidlitz mixture, bbls. 5,000-lb. lots lb. .30½- —
smaller lots lb 31 .32
Selenium powd., 99½% dms., dlvd. lb.12.00 • —
Senega root, bls lb. 2.75 • —
Senna leaves, Alex. whole and half, bls lb. .19 • —
siftings lb. .17 • —
Tinnevelly, No. 1, bls lb. .16 • .18
No 2 bls. lb. 13 • .15
No. 3, bls. lb. .11 • .13
powdered, bbls., bxs lb. .15 • —
pods bls. lb. .14 • —
Serpentaria root, bls lb 5.50 • —
Sesame seed, Egyptian, hulled, bgs. lb. .22½- —
nat., bgs. lb. .17 • —
Nicaragua, hulled, shipt., bgs. lb. .25 • —
nat., bgs lb. 16½- —
Salvadorian, natural, bgs. lb. .21½- —
Indian, natural, bgs. lb. N.P.
Shellac, bleached, bonedry, bgs., 2,500-lb. lots lb. .54 • —
bbls., 1,500-lb. lots lb. .55 • —
kgs., 1,500-lb. lots lb. .56 • —
refd., bgs., 1,500-lb. lots lb. .64 • —
bbls. 1,500-lb lots lb. .65 • —
kgs., 1,500-lb lots lb. .66 • —
Bonedry shellac prices for less than 1,500 lb lots 1c. per lb higher for all packages.
Lemon, No. 1, bgs., 10-bg. lots lb. .47 • —
No. 2, bgs., 10-bg. lots lb. .45 • —
Superfine, bgs., 10-bg. lots lb. .43 • —
Shellac in 1 to 10-bg lots 1c per lb more.
Shingle stain oil (see Oil shingle stain)
Silica, amorph., dry-grd. 325 mesh, bgs., c.l., works ton.25.00 —
t.c.l. works exwnse ton.45.00 -55.00
hard-quartz, 99½%, 325 mesh, bgs., c.l., works ton.20.00 —
t.c.l., works ton 25.00 -30.00
140 mesh bgs. c.l., works ton 15.00 —
t.c.l. works ton 20.00 —
Silicon tetrachloride, tech., dms., c.l., works lb. .18 • —
t.c.l. works lb. .22 • .30½
tanks, works lb. .17 • —
Silver bullion, ingots, cs. Troy oz. .91¾- —
Cyanide fib dms., 2,500-oz lots. oz. .87 • —
1,000-oz. lots oz. .87¾- —
500-oz. lots oz. .87½- —
100-oz. lots oz. .87¾- —
Nitrate, CP cryst., bots., 2,500-oz. lots oz. .62⅜- —
1,000-oz. lots oz. .63½- —
500-oz. lots oz. .64½- —
250-oz. lots oz. .64½- —
USP granular silver nitrate 4c. per oz higher.
Proteinate mild USP, buts., dms., 1,000-oz. lots oz. 1.15 • —
strong NF bots. dms. 1,000-oz. lots oz. 1.10 • —
Soapbark, whole, bls lb .38 • .40
crushed bls., bbls lb .45 • —
powd. bbls lb .45 • —
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 • —
t.c.l., stock points 100 lbs. 3.00 • 4.77
bulk, c.l., works 100 lbs. 1.60 • —
light, 58%, paper bgs., c.l., works 100 lbs. 1.85 • —
t.c.l., stock points 100 lbs. 3.95 • 4.72
bulk, c.l., works 100 lbs. 1.55 • —
Soda, caustic, flake, 76% dms., c.l., works, frt. equald 100 lbs. 4.70 • —
t.c.l., stock points 100 lbs. 5.80 • —
liq., 50%, sellers tanks, works, dry basis 100 lbs. 2.90 • —
rayon type, sellers, tanks, works, dry basis 100 lbs. 2.90 • 3.00
73%, sellers' tanks, works, dry basis 100 lbs. 3.00 • —
rayon-type sellers' tanks, works, dry basis 100 lbs. 3.00 • 3.10
solid, 76%, dms., c.l., works, 100 lbs. 4.30 • —
t.c.l., stock points 100 lbs. 5.50 • —
Sal. conc., bgs., c.l., works. 100 lbs. 2.50 • —
smaller lots, works 100 lbs. 2.80 • —
Sodium acetate, anhyd. bgs., c.l., frt. equald lb. .13 • —
dms., t.c.l., frt. equald lb. .13¾- —
NF, 60% gran dms., c.l., works lb. .14 • —
t.c.l., works lb. .15½- —
Alginate, NF white powd., dms., 300 lbs. or more lb. .93 • —
p-Aminohenzoate, dms., 1,000-lb. lots or more lb. 2.35 • —
smaller lots lb. 2.45 • 2.55
p-Aminosalicylate, dms., 100 lbs. or more, frt. adjusted lb 2.70 —
Antimoniate, bbls. c.l., dlvd. E. lb. .28 • —
t.c.l., dlvd. E lb. .29½- —
Arsenate, 45% arsenic pentoxide, dms., c.l., works lb. .12½- —
t.c.l., works lb. .13¾- .14½
Arsenite, 90%, pink powder, 75% arsenious oxide, dms., works lb. .12¼- —
t.c.l., works lb. .13 • .14½
soln. dms. works gal. .59 • .67
Ascorbate, dms., 25-50 kilo lots. kilo.12.00 • —
10-kilo lots kilo.12.35 • —
5-kilo lots kilo.12.75 • —
1-kilo lots kilo.13.00 • —
bots., 500-gram lots kilo.13.50 • —
Benzoate, tech., bbls., dms., lots or more lb. .39 • —
USP, bbls., dms. 100-lb. lots, or more lb. .46 • —
Bicarbonate, USP, gran., bgs., c.l., works 100 lbs. 2.95 • —
t.c.l., works 100 lbs. 3.85 • —
powd., bgs., c.l., works, 100 lbs. 2.55 • —
t.c.l., works 100 lbs. 3.45 • —
Bichromate, gran., bgs., c.l., t.l., works lb. .13 • —
t.c.l, works lb. .13½- .14¾
Bifluoride, bbls. c.l., works, frt. equald lb. .19½- —
t.c.l., same basis lb. .1990- —
Bisulfate, bulk., c.l., works 100 lbs. 2.00 • —
dms., c.l., frt. equald 100 lbs. 3.00 3.60
t.c.l., frt. equald 100 lbs. 3.50 4.10
Bisulfite, anhyd., bgs., c.l., works, 100 lbs. 5.00 • —
t.c.l., works 100 lbs. 5.40 • —
soln., 35° bbls., c.l., works, 100 lbs. 1.55 • —
t.c.l., works 100 lbs. 2.05 • —
Borate (see Borax).
Bromide, USP bbls., works lb. .38 • —
Carboxymethyl cellulose (see CMC).
Carbonate, cryst., monohydrated, (see Soda, sal).
monohydrated, bgs., c.l., works, 100 lbs. 3.10 • —
t.c.l., works 100 lbs. 3.50 • —
Chlorate, cryst. dms., c.l., works, lb. .09 • —
t.c.l., works lb. .09½- .10¼
Chloride, tech (see Salt).
USP, dms., 300 lbs. or more lb. .08 • —
Chlorite, tech. dms., c.l., works, lb. .58 • —
20-ton lots or more, works, lb. .66 • —
smaller lots, works lb. .70 • .73
Chloroacetate, tech., dms., c.l., works lb. .27 • —
t.c.l. works lb. .28 • —
Chromate, anhyd., fiber dms., c.l., t.l., works lb. .14¾- —
t.c.l., same basis lb. .15¼- .16½
tetrahydrate, bgs., c.l., t.l., works lb. .1015- —
t.c.l. lb. .1065- .1190
Citrate, anhyd., dms lb. .62 • —
NF VIII, gran. dms lb. .26½ .27¼
USP XIV gran., dms lb. .29½ .30¼
Sodium citrate USP powd. prices ½c higher.

●

NEW ATLAS TECHNICAL CENTER

to broaden research into chemistry of the future



Architect's drawing of new Atlas Technical Center, to be occupied early in 1958. The building, located next to the Atlas Office Building on the outskirts of Wilmington, will cost about $3,000,000.

THIS NEW Atlas Technical Center is the latest step in an Atlas program of growth encompassing its long-range research, as well as its applications research and customer service. Within the next three years, we plan to approximately double our research and development power. You can look to new and greater chemical developments from Atlas . . . more contributions toward the knowledge of chemical products and processes yet unknown.

The Technical Center will provide extensive facilities for research and development across the entire range of applications served by present Atlas products, including sorbitol, emulsifiers, detergents, polyester resins, activated carbons, and explosives.

For the near future, this will mean more technical help for our present-product customers on their own new products, more ways for them to cut their own research costs through working with us. For the not-too-distant time to come, we hope it will mean more and better Atlas products and services —not only for the many industries we now serve, but for an even broader list of industries and, too, for the creation of new industries.

CHEMICALS DIVISION
ATLAS POWDER COMPANY
WILMINGTON 99, DELAWARE
Offices in principal cities

These products and industries use Atlas chemicals

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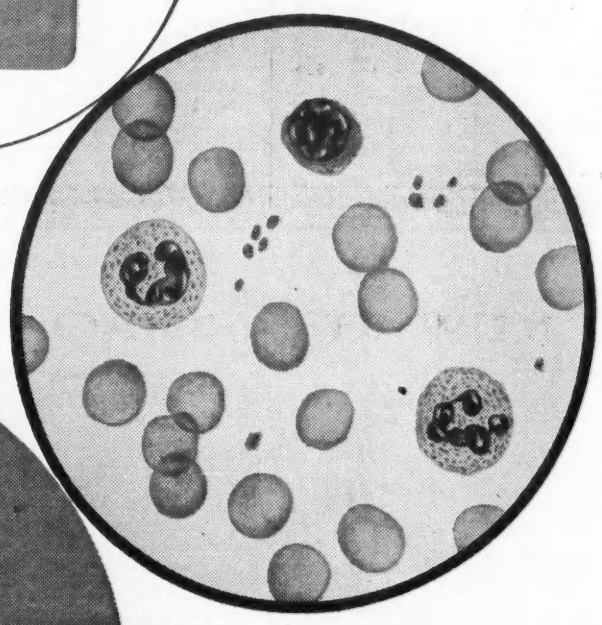
BREWING	DRY CLEANING	INSECTICIDES	PLASTICS
CHEMICALS	EDIBLE FATS & OILS	LUBRICANTS	POLISHES
CLEANING COMPOUNDS	ELECTROPLATING	PAINTS	RESINS
CONFECTIONS	EXPLOSIVES	PAPER	RUBBER
COSMETICS	FOODS	PERFUMES	SUGAR
CUTTING OILS	GLUE SPECIALTIES	PETROLEUM	TEXTILES
DETERGENTS	HERBICIDES	PRODUCTION	TOBACCO
			VITAMIN PRODUCTS
			WATER PURIFICATION



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a normal blood picture

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when used alone or as a constituent of drug preparations.

In a search for ferrous iron in a form that would be *well tolerated*, have a *high iron content*, and yet be *exceptionally stable*, Mallinckrodt research discovered TOLERON, a new standard in iron therapy.

When TOLERON is administered orally to human patients suffering from an iron-deficiency anemia, the rate of hemoglobin regeneration has been found to be optimal when compared with ferrous sulfate and ferrous gluconate. And important . . . there appears to be little, if any, gastrointestinal discomfort.

TOLERON may be combined with various substances in tablets, capsules and other oral dosage forms. It may be tableted employing the usual granulating solutions, fillers, lubricants and disintegrating agents. Uncoated TOLERON tablets are stable and do not possess the marked "iron taste" which characterizes the uncoated tablets of most iron compounds.

Write for technical data on TOLERON

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Sodium Cyanate—Sodium-Formaldehyde Sulfoxylate

Sodium cyanate, dms., 1,000-lb. lots, works lb .85 1.10
smaller lots, works lb 1.00 1.25
Cyanide, flake, 96-98%, dms., c.l. or 20,000-lb. lots lb. .193 - —
over 1,000-lb. lots lb. .203 - —
100-lb. to 1,000-lb. lots lb. .213 - —
Granular sodium cyanide 1c. higher.
Diacetate, 33-35% acidity, 250-lb. dms., works lb. .15 - —
l.c.l., works lb. 15¾ - —
anhyd., dms., c.l. works lb 18 —
l.c.l. works lb 18¾ —
Ferrocyanide, bgs., 10-ton lots lb. .13½- —
smaller lots. lb 14 —
Fluoride, white, 97% fib dms., c.l., works, frt equald lb. .1390- —
l.c.l. works lb. 1430- —
Formate bgs., c.l., works 100 lbs. 7.60 - —
l.c.l., works 100 lbs 8.65 —
Gentisate, 100-lb. fib. dms lb. 5.50 - —
Gluconate, refd., dms. lb. 80 .83
tech dms lb 35
Hydride, dms., works lb. 1.80 - 3.00
Hydrosulfide (see Sodium sulfhydrate)
Hydrosulfite dms. c.l. frt. alld. lb. .24 - —
l.c.l., frt. alld. lb. .24½ - —
Hydroxide, NF, pellets, 100-lb. dms., 1 to 100-dm. lots lb. .23½- .28
technical (see Soda Caustic).

Sodium hypophosphite, NF, dms., 1,000-lb. lots lb. .97 - —
Hyposulfite, NF, 1,000-lb. lots lb. .97 - —
Hyposulfite, anhyd. tech., bgs., c.l., works 100 lbs. 7.25 - —
l.c.l., works 100 lbs. 7.65 - —
photo grade, bgs., c.l., works. 100 lbs. 8.05 - —
l.c.l., works 100 lbs. 8.45 - —
Hexahydrate, pea cryst., bgs., c.l., works 100 lbs. 5.15 - —
l.c.l. works 100 lbs. 5.55 - —
photo grade, bgs., c.l., works, 100 lbs. 7.75 - —
l.c.l., works 100 lbs 8.05 - —
Pentahydrate, tech., bgs., c.l., works 100 lbs. 5.15 - —
l.c.l., works 100 lbs. 5.55 - —
Iodide, USP, bots., dms lb. 2.55 - —
Lactate, edible, 50%, cbys., dms., works lb. .21½- —
60% cbys dms works lb 26½ —
tech. 50% cbys. dms. works lb 16½ -
Lauryl sulfate, dms. c.l., dlvd lb. .19 - —
l.c.l., dlvd lb. .19½- .20¾
tanks, dlvd lb. .18 - —
Metabisulfite (see Sodium bisulfite).
Metaborate octahydrate gran., bgs., c.l., works ton.87.00 - —
ton lots, ex whse ton.143.00 - —
smaller lots, ex whse ton.148.00 - —
tetrahydrate, dms., c.l., works. ton.204.00 - —
ton lots, ex whse ton.242.50 - —
smaller lots, exwhse ton.247.50 - —

Sodium, metallic bricks, 14,000-lb. lots or more, works lb. .19½- —
fused, 14,000-lb. lots, works. lb. .19 - —
tanks, works lb. .17 - —
Metanilate, bbls., frt. alld lb. .62 - —
Metasilicate, anhyd., bgs., c.l., works 100 lbs. 5.70 - —
l.c.l. works 100 lbs. 6.15 - 8.10
dms., c.l 100 lbs. 6.20 - —
l.c.l. 100 lbs. 6.65 - 8.55
Pentahydrate, bgs., c.l., works. 100 lbs. 4.45 - —
l.c.l. works 100 lbs. 4.85 - 6.75
dms., c.l. works 100 lbs. 4.95 - —
l.c.l., works 100 lbs. 5.35 - 7.25
Molybdate, anhyd., dms., works, frt. equald lb. .92 - .86
cryst., dms. works. frt. alld lb. .73 - .74
Monoglutamate, dms., c.l. lb. 1.15 - —
l.c.l. lb. 1.23 - 1.27
Monohydrate (see Sodium carbonate monohydrated).
Naphthionate bbls lb. .70 - —
Nitrate, crude dom. bgs., c.l., works ton.47.00 - —
bulk c.l., works ton.43.50 - —
imp 100-lb. bgs., c.l., Atl. Gulf, Pac., whse ton.49.50 - —
bulk, c.l. same basis ton.46.00 - —
Nitrite, USP, bbls., c.l., works, frt. equald 100 lbs. 8.50 - —
l.c.l., same basis 100 lbs.10.50 - —
Orthosilicate, conc., dms., c.l., works 100 lbs. 6.70 - —
l.c.l., works 100 lbs. 7.05 - 7.65
hydrated, flake, bbls. c.l., works, 100 lbs. 5.65 - —
l.c.l., works 100 lbs. 7.60 - 7.90
Oxalate, 88%, bgs., works 100 lbs.10.85 - —
Para-aminobenzoate (see Sodium p-Aminobenzoate).

Sodium para-aminosalicylate (see Sodium p-Aminosalicylate).
Pentachlorophenate, briquets, bgs., c.l., works, frt equald lb. .26 - —
l.c.l. same basis lb. .27½- .34
pellets, bgs., c.l., same basis lb. .26 - —
l.c.l. same basis lb .27½- .34
powd., bgs., dms., c.l., same basis. lb. .25 - —
l.c.l. same basis lb. .26½- .33
Sodium pentachlorophenate, 20,000 lbs., min. truckloads, ¼c per lb over carlot prices
Perborate, NF, tech., bgs., c.l., works lb. .19 - —
l.c.l., works lb. .21 - —
Peroxide, dms., c.l., dlvd. E. of Miss lb. .20 - —
l.c.l. same basis lb. .20½- .21
Phenolsulfonate USP IX, gran., dms lb. 44 45
Phosphate, dibasic, anhyd., bgs., c.l., frt. equald 100 lbs. 7.05 - —
l.c.l., works 100 lbs. 8.05 - 8.65
duohydrate, bgs., c.l., frt equald 100 lbs. 7.60 - —
l.c.l., frt. equald 100 lbs. 8.10 - —
USP dried powd bgs., dms., works lb 19 .20½
monobasic anhyd., bgs., c.l., frt. equald 100 lbs 8.70 —
l.c.l., frt equald 100 lbs 9.10 9.70
tribasic, anhyd., bgs., c.l., frt. equald 100 lbs. 8.00 - —
l.c.l., frt. equald 100 lbs 9.05 9.65
cryst., bgs., c.l., t.l., frt. equald 100 lbs 4.40 —
l.c.l., frt. equald 100 lbs 4.80 5.40
Sodium phosphates in dms. 60c higher than bgs.
Prussiate, yellow (see sodium ferrocyanide).
Pyrophosphate, acid, bgs., c.l., works, frt. equald 100 lb.10.85 - —
l.c.l., works 100 lbs.11.60 -11.85
Ferric, dms., c.l., t.l., works lb. .36 - —
l.c.l., works lb. .37 - .39
tetrabasic, anhyd., bgs., c.l., works, frt equald 100 lbs. 7.52½- —
l.c.l. frt. equald 100 lbs 7.92½- 8.52½
Salicylate, USP, dms lb. 74 - .76
Sesquicarbonate, bgs., c.l., works. 100 lbs. 2.35 - —
l.c.l., dlvd, zone 1 100 lbs. 4.10 - 4.35
zone 2 100 lbs. 4.35 - 4.60
zone 3 100 lbs. 4.75 - 4.90
zone 4 100 lbs. 5.35 - 5.60
Sales zones are: (1) Atl. States E. of Miss., R. and N. of south bound of Ky. and Va., Ala., La., and Miss., south of 31° Tex. E. of 100°; S. of 31° Fla.; also Me., N. H., and Vt., in which there are special county zones; Davenport, Ia., and St Louis; (2) Ark E. of 98° Ga.; Iowa (except Davenport), Minn., Mo. (except St. Louis) Neb. E. of 98° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No. of 31°; (3) Ark. W. of 96°, Kan., Neb. W. of 98°, N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex.
Sesquisilicate, hydrated, bgs., c.l., works 100 lbs. 5.00 - —
l.c.l., works 100 lbs. 5.35 - —
dms., c.l., works 100 lbs. 5.50 - —
l.c.l., works 100 lbs. 5.85 - —
Silicate, liq., 40° Be, 1:3.2, turbid, dm., c.l., works 100 lbs. 1.55 - —
l.c.l., works 100 lbs. 1.90 - 2.40
tanks, works 100 lbs. 1.20 - —
47° Be, turbid, 1:2.9, dms., c.l., works 100 lbs. 2.25 - —
l.c.l., works 100 lbs. 2.95 - 3.10
tanks, works 100 lbs. 1.90 - —
52° Be, turbid, 1:2.4, dms., c.l., works 100 lbs. 2.65 - —
l.c.l., works 100 lbs. 3.00 - 3.50
tanks, works 100 lbs. 2.30 - —
solid, 1:3.2, bgs., works ton.67.50 - —
Silicofluoride, bgs., c.l., works lb. .075 - —
l.c.l. works lb. .079 - —
Sodium silicofluoride in dms., 0.4c per lb. higher.
Stannate, dms., works, frt. alld. E lb. .642 - .702
Sulfa drugs (see Sulfa name)
Sulfanilate, bbls., works lb. .22 - —
Sulfate, NF, VII, dried, powd., dms lb. .22½- —
tech., anhyd., bgs., c.l., dlvd. E ton.52.00 - —
detergent, rayon grade, bgs., c.l., works ton.34.00 - —
bulk, c.l., works ton.31.00 - —
USP, cryst., fib. dms lb. .17½- .18
gran., fib. dms lb. .17½- .18
Sulfhydrate, flake, 70-72%, dms., c.l., works lb. .06¾- —
l.c.l., works lb. .07¾- —
liq., 40-44%, tanks, works, 100% basis ton.120.00 - —
Sulfide, flake, dms., c.l., works, E., frt. equald lb. .05½- —
l.c.l., same basis lb. .06½- —
fused, bbls., c.l., works E., frt. equald lb. .05 - —
l.c.l., same basis lb. .06 - —
Sulfite, anhyd., bgs., c.l. 100 lbs. 3.50 - —
t.l., same basis 100 lbs. 4.00 - —
Sulfocyanide, CP (see Sodium thiocyanate).
Tetraborate (see Borax).
Tetrasulfide, liq., 40%, dms., c.l., c.l., works lb. .04 - —
l.c.l., works lb. .05 - —
Thiocyanate, CP, dms lb. .55 - .65
tech., anhyd., dms., 1 ton lots or more, works lb. .317 - —
less than ton lots, works lb. .337 - —
Thiosulfate, NF, cryst., bbls lb. .13½- —
tech (see Sodium hyposulphite).
Titanate, etns., c.l., works lb. .10½- —
5-ton lots, works lb. .10¾- —
1-ton or less, works lb. .11 - —
Toluene sulfonate, dms., c.l. or t.l. lb. .38 - —
l.c.l. lb. .42 - —
Trichloroacetate, 90%, 100-lb. dms., c.l., frt. alld. E lb. .37½- —
l.c.l., frt. adjusted, E lb. .39½- —
50-lb. dms., c.l. frt. alld. E. lb. .38 - —
l.c.l., frt. adjusted E lb. .40 - —
10-lb. cns., c.l., frt. alld E lb. .44 - —
l.c.l., frt. adjusted E lb. .46 - —
Prices on Sodium trichloroacetate W. of the Rockies are 1¾c. per pound higher.
Tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 7.87½- —
l.c.l., same basis 100 lbs. 8.27½- 8.87¼
Trisilicate, powd., 1:3.2, bgs., c.l., works 100 lbs. 8.65 - —
l.c.l., works 100 lbs. 9.40 - 9.80
dms., c.l., works 100 lbs. 9.05 - —
l.c.l., works 100 lbs. 9.80 -10.30
Tungstate, tech., kgs., dlvd. E lb. 2.15 - —
Sodium-ammonium phosphate, bbls., works, frt. equald lb. .23 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium-formaldehyde sulfoxylate, dms., c.l., dlvd lb. .21 - —
l.c.l., same basis lb. .21½- —

Commercial Laundries
Dyeing and Finishing
Paint
Bottle Washing
Car Washing
Suggestion for a surfactant processor who can see profit in these pictures
If you're compounding liquid or dried formulations of the alkyl aryl surface-active type, we suggest that you start with "the successful ingredient"
NEOLENE 400
the basic raw material used by the foremost detergent processors
Leather Processing
Paper & Pulp
Liquid Detergents
Metal Cleaning
Dairy
Railroad
Household Detergents

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Consider these other Conoco Petrochemicals

WATER-SOLUBLE SULFONATES—produced from NEOLENE 400. Available as sulfonate slurry, sulfonic acid, or in spray-dried and drum-dried forms.

OIL-SOLUBLE SULFONATES—manufactured by sulfonation of synthetically produced hydrocarbon under closely controlled conditions.

CONOCO H-300—Secondary plasticizer for vinyls "the extender of profit"—outstanding light stability . . . improved low-temperature flexibility . . . viscosity depressant and stabilizer in plastisols.

CONOCO Petrochemicals

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Petrochemical Department

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Continental Oil Company, Petrochemical Department, Division D-1
630 Fifth Avenue, New York 20, N. Y.—1353 No. North Branch Street, Chicago, Ill.
Export: Airco Company International, 150 East 42nd Street, New York 17, N. Y.

Sodium-zirconyl sulfate, fiber dms., 1,000-lb lots or more works lb. .28 - —
smaller lots same basis lb. .30 - —
Solvent naphtha, coaltar, high flash, tanks, frt. equald gal. .31 - .32
petroleum (see Petroleum solvent, partial aromatic)
Sorbitan monostearate, fib dms., 20,000-lb. lots, works lb. .32 - —
10,000 to 20,000-lb lots, works. lb. .34 - —
smaller lots, works lb. .37 - .39
Tristearate, fib dms., 20,000-lb. lots, works lb. .33 - —
10,000 to 20,000-lb lots, works. lb. .35 - —
smaller lots works lb. .38 - .40
Sorbitol, cryst., resin grade, pellets, dms., c.l., works lb. .23 - —
1 to 5-ton lots, works. lb. .25 - .26
powd., dms. 1 to 5-ton lots, works lb. .38 - .39
soln., coml. aqueous, dms., c.l., works lb. .24¼ - —
ton lots, works lb. .25 - —
smaller lots, works lb. .25¼ - —
tanks, works lb. 23¼ - —
reg. 70% aqueous, dms., c.l., works lb. .16 - —
ton lots, works lb. .16¾ - —
smaller lots, works lb. .17 - —
tanks works lb .15 - —
Soybean meal, 44% bulk, Decatur, ton. 47.00 - —
protein chemically isolated, bgs., c.l., works lb. .23 - —
mechanically refd., bgs., l.c.l., works lb. .066 - —
Sparteine sulfate, cns oz. .80 - .90
Spearmint leaves, dom., bls lb. .75 - —
Spruce extract, liq., reg. tanks, works lb .01¾ - —
powd., super, bgs., c.l., works lb. .05¼ - —
l.c.l., works lb. .05½ - —
Squill, white, bls lb. .16 .18
powd., bbls., bxs lb. .17 .20
St. John's bread, edible, bls lb. .13 .15
Stannic chloride anhyd., dms., works lb. .799 - .809
Oxide, dms., dlvd., E lb. 1.06½ - 1.07½
Stannous chloride anhyd., dms., works lb. .927 - 1.421
hydrous, cryst., dms., works. lb. .81 - .82
Sulfate, dms., works lb. 1.062 - 1.082
Starch, corn, pearl, paper bgs., c.l. 100 lbs. 7.32 - —
l.c.l. 100 lbs. 7.47 - —
powd., paper bgs., c.l. 100 lbs. 7.44 - —
l.c.l. 100 lbs. 7.59 - —
Prices for corn starch in cotton bags, 15c per 100 lbs higher
Potato, dom., Idaho bgs., c.l., works lb. .06 - —
Maine, bgs., c.l., works lb. .06¼ - —
ex whse, N. Y. lb. .08¼ - .09¼
Rice, bgs., l.c.l lb 15½ .16
Wheat, bgs lb. .08½ .09
Star root (see Helonias root).
Stargrass Root (see Aletris root).
Stavesacre seed, bgs lb. .60 .61
Stearine oleo (see Oleostearine).
Stramonium leaves, bgs lb .18 .20
Soybean meal, 44% bulk, Decatur.
Streptomycin hydrochloride, bulk, gram. lb. .0750- .0775
Strontium bromide, NF, dms., 150-lb. fib. dms lb. .88 - —
Carbonate, pure, dms., 5-ton lots or more, works lb. .35 - —
1-ton lots, works lb. .37 - —
tech., dms., works lb. .19 - —
Chromate, bbls., works lb. .46 - —
Iodide, pars, 25-lb lots lb 3.40 - —
Nitrate, bbls., c.l., works 100 lbs. 11.00 - —
l.c.l., works 100 lbs. 12.00 - —
Salicylate, NF dms lb. 1.78 - —
Sulfate, air floated, 90%, 325 mesh, bgs., works ton. 56.70 -66.15
Strophanthin, K., bots. oz. 25.00 -25.50
G. (see Ouabain, USP)
Strophanthus seed, Kombi, biologically tested, bgs lb. 3.50 - 3.75
Styrax, USP cs lb .78 - .80
Styrene monomer, polymer grade, 99½% dms. c.l. frt. alld. lb. .22½ - —
l.c.l. same basis lb. .23½ - —
tanks, same basis lb. .20½ - —
synthetic rubber grade, 99% dms., c.l., frt. alld. lb. .18½ - —
l.c.l. same basis lb. .19½ - —
tanks, same basis lb. .16 - —
Styrolyl acetate, bots lb. 1.45 1.70
Sucrose, refd., white, bgs., refy., E lb. .0685- —
Octa-acetate, denaturing grade, 100-200-lbs., bgs., l.c.l., works lb. .76 - —
Sugar (see Sucrose).
Sulfabenzamide, dms lb 4.00 4.50
Sodium dms lb 4.10 4.60
Sulfacetamide, fib. dms lb 4.00 4.20
USP, same basis lb. 5.00 - 5.20
Sodium fib dms lb 5.00 5.20
USP, same basis lb. 5.20 - 5.40
Sulfadiazine USP microcrystals, dms lb. 10.60 -11.10
powd. dms lb. 10.25 -10.75
Sulfadiazine-sodium, USP dms lb. 11.25 -11.75
microcrystals, dms lb. 11.60 -12.10
Sulfaguanidine USP dms lb 2.50 —
Sulfamerazine USP microcrystals, lb. 10.65 -11.15
Sulfamerazine-sodium, USP dms., lb. 11.25 -11.75
Sulfamethazine, microcrystals, dms., lb 8.90 9.40
powd., dms lb 8.50 9.00
Sulfanilamide USP 30-80 mesh, dms lb. 1.40 1.60
microcrystals, dms lb 1.70 1.90
powd., dms lb. 1.30 1.50
Quinoxaline, veterinary, dms lb 6.40 6.75
Sulfapyridine NF powd. bots. tins, lb. 7.00 7.50
Sulfapyridine-sodium, monohydrate, dms lb. 7.50 8.00
Sulfathiazole, NF, microcrystals, dms lb 2.85 3.00
powd. dms lb 2.50 2.65
Sulfathiazole-sodium, NF, dms lb. 2.75 - 2.90
Sulfur, coml., flour, bgs., mines. 100 lbs. 2.55 - —
bbls., mines 100 lbs. 3.30 - —
lump, bgs., mines 100 lbs. 2.45 - —
bbls., mines 100 lbs. 2.90 - —
crude, bulk, f.o.b. cars, mines. long-ton. 26.50 - —
export, f.o.b. vessels Gulf ports. long-ton. 26.00 - —
dometsic and Canada, f.o.b. vessel Gulf port long-ton. 28.00 - —
refd., flowers, USP, bgs., mines 100 lbs. 4.25 - —
bbls., mines 100 lbs. 5.50 - —
flour, light, bgs., mines 100 lbs. 3.85 - —
bbls., mines 100 lbs. 4.75 - —
lump, bgs., mines 100 lbs. 3.55 - —
rolls, bgs., mines 100 lbs. 4.10 - —
bbls., mines 100 lbs. 4.65 - —
salt block, bbls., mines. 100 lbs. 3.75 - —
virgin block, bbls., mines. 100 lbs. 3.70 - —
rubbermakers, coml., reg. bgs., mines 100 lbs. 2.65 - —
bbls., mines 100 lbs. 3.80 - —
98-100% passing through 325 mesh, bgs., mines 100 lbs. 2.75 - —
bbls., mines 100 lbs. 3.90 - —

Sulfur, rubbermakers, refd., bgs., mines 100 lbs. 3.50 - —
bbls., mines 100 lbs. 4.55 - —
treated, 2.5% mineral oil, bgs., mines 100 lbs. 2.95 - —
bbls, mines 100 lbs. 4.10 - —
Dichloride, dms., c.l., works, frt. equald. lb. .04 - —
l.c.l. same basis lb. .04¾ - —
tanks, same basis lb .03¾ - —
Dioxide, liq., coml., cyls. works, frt. equald lb. .10 - .12
multi unit cars, works lb. .0535- —
tanks, works lb .045 - —
refrigeration, 150-lb cyls. dlvd. lb. .30 - —
Monochloride, 55-gal. dms., c.l., frt. equald lb. .04 - —
l.c.l. same basis lb. .04¾ - —
tanks, same basis lb. .03¾ - —
Sumac leaves, 28% tannin, bgs., ex-dock ton. 130.00 - —
ground, bgs., ex-dock ton. 130.00 - —
Superphosphate, run-of-pile, under 22% a.p.a. pulv., bulk, c.l., Balto., unit-ton. .88 .91
Carteret, N J unit-ton. .88 - .91
triple 48% or more a.p.a., pulv., bulk, c.l. East Tampa, Fla. unit-ton .98 - —

T

2,4,5-T, dms., c.l., works, frt. equald. lb 1.18 - —
l.c.l., same basis lb 1.25 - —
Isopropyl ester, dms., c.l., works, frt. equald lb 1.24 - —
l.c.l., works lb 1.29 - —

Talc, dom., ord., Calif., grd., bgs., c.l., works ton. 33.00 -39.50
Vermont off color grd., bgs., c.l., works ton. 19.40 —
l.c.l., works ton. 37.00 - —
fibrous, New York, grd., bgs., c.l., works ton. 28.00 - —
l.c.l., works ton. 31.00 -36.00
99.5%, 325 mesh, bgs., c.l. works ton. 31.00 - —
l.c.l., works ton. 34.00 - —
99.95% micronized, bgs., works ton. 38.00 - —
Imp. Canadian, grd., bgs., c.l., mines ton. 20.00 -35.00
Tallow, edible, tanks, dlvd. lb. .14¼ - —
inedible, fancy, bleachable, tanks, dlvd. lb. .07⅞ - —
guaranteed, dms., f.a.s. lb. .09¼ - .09⅝
No. 1, tanks, dlvd. lb. .06⅞ - —
prime, tanks, dlvd. lb. .07⅝ - —
special tanks, dlvd. lb. .07¼ - —
sulfonated, 25%, bbls., l.c.l. lb. .08⅜ - .08⅞
50%, bbls., l.c.l. lb. .09⅜ - .10⅛
Tankage, animal, feeding, 9-11% ammonia, bulk unit-ton. 5.00 - —
Chicago, bulk unit-ton. 6.00 - —
Tapioca flour, Brazilian, bgs., ex whse lb. .10½ Nom.
Tar acid oil, 15-18%, dms., c.l., frt. equald gal. .47 - .49
l.c.l., same basis gal. .50 - .51
tanks, same basis gal. .39 - —
Tar acid oil, 25-28%, dms., c.l., same basis gal. .54 - .56
l.c.l. same basis gal. .57 .58
tanks, same basis gal. .46 —
50-53%, dms., c.l., same basis, gal. .70 - .72½
l.c.l. same basis gal. 73½ 74½
tanks, same basis gal. 62½ —
Coal (see Coaltar).
Tartar, emetic (see Antimony-potassium tartarate).
Terpine glycol ether, dms., c.l., works lb. 23½ —
l.c.l. works lb. 25½ —
tanks, works lb. 22 —
Hydrate, NF, cryst., powd., 100-lb fib. dms lb. .70 - —
Terpineol, dms., l.c.l., dlvd E lb. .23¾ - —
extra dms lb. .41 .60
prime, dms lb. .30 .45
Terpinyl acetate, extra, cns. dms. lb. .60 .75
prime, dms lb .55 .70
Propionate, dms lb. 1.75 2.00
Terra alba (see Gypsum)
Testosterone USP, 100-gm. lots, bots gram. .70 - —
Propionate USP, 100-gm. lots, bots gram. .68 - —
Tetrachloroethane, dms. works lb. .14½ - —
Tetrasodium pyrophosphate (see Sodium pyrophosphate)
Tetrachloroethylene, tech (see Perchloroethylene)
USP 55 gal. dms., works lb. .20½ .21½
smaller dms. works lb. .23½ .25

MONTROSE
CHEMICAL COMPANY
104-112 LISTER AVENUE
NEWARK, NEW JERSEY

TETRA ETHYL ORTHO SILICATE
DI SILOXANES

Montrose new production of the highest purity Tetra Ethyl Ortho Silicate and Di Siloxanes are now available.

Samples and specifications are available on request.

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R. W. GREEFF & CO., INC.
10 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.
1721 TRIBUNE TOWER, CHICAGO, ILLINOIS

Tetraethyl orthosilicate dms., c.l., dlvd E lb. 61½ -
t.c.l., dlvd E lb. 62½ -
Pyrophosphate 40% cns., dms., frt equald lb 75 -
Tetraethylenepentamine dms., c.l., dlvd E lb. 49 -
t.c.l. dlvd E lb 50 -
tanks, dlvd E lb 47 -
Tetrahydrofuran dms. c.l., or t.l., works lb .36½ -
t.c.l. or t.t.l. works lb .37 -
tanks, works lb 35 -
Tetrapotassium phosphate (see Potassium phosphate)
Thallium metal dlvd lb. 12.50 15.00
Sulfate 99% bots dlvd lb 8.00 13.00
Theobromine, NF, fib. dms. lb. 4.00 -
And sodium acetate USP fib dms lb. 4.45 . -
Sodio-Salicylate, NF, fib. dms lb. 3.60 . -
Theophylline, anhyd., or USP., 100-lb. dms lb. 3.65 . -
Thiamine hydrochloride, USP, regular fib dms kilo.60.00 -
ampule grade, fib dms kilo.62.00 . -
Mononitrate. USP fib dms kilo 62.00 -
Thiocarbanilide dms. ton lots lb 72 -
less ton lots lb. .74 . -
Thiodiphenylamine (see Phenothiazine)
Thiourea, tech., bgs., t.l., frt. alld. lb .33 . -
t.c.l., frt, alld lb. .35 . -
Thorium nitrate, purif., fib dms., 100-lb. lots or more. works lb 3.50 -

dl-Threonine bots., 1-kilo lots. kilo 450.00 500.00
Thymol, fib. dms lb 2.50 2.75
Iodide, NF, dms. lb 7.30 -
Timbo root (see Cube root)
Tin chloride (see Stannous chloride, anhydrous).
Tin chloride (see Stannous chloride, hydrous).
Oxide (see Stannic oxide).
Metal (Straits) lb. 1.01½ -
Sulfate (see Stannous sulfate).
Tetrachloride anhyd. (see Stannic chloride, anhydrous)
Titanium dioxide anatase, chalk-resistant, bgs. c.l., dlvd lb .24½ -
t.c.l., dlvd. lb .25½ -
ceramic, bgs., c.l., dlvd. lb .22½ -
t.c.l., dlvd. lb .23½ -
reg., bgs., c.l., dlvd lb 22½ -
t.c.l., dlvd lb. .20½ -
metallurgical, nat., gran., bgs., c.l., f.o.b. Jacksonville, Fla ton 120.00 -
Niagara Falls, N. Y., c.l., ton.137.50 -
5-ton lots ton 142.50 -
ton lots ton.147 50 -
rutile nonchalking, bgs., c.l., dlvd. E lb. .26½ -
t.c.l. dlvd E. lb. 27½ -
Milled metallurgical titanium dioxide $7.50 per ton higher.
Hydride, cns., works. lb. 7.95 9.00

Titanium pigment, calcium-rutile base, reg., bgs., c.l., dlvd. lb. .09¼ -
t.c.l., works lb. .09¾ -
high-tinting, dms., c.l. lb. .09 . -
t.c.l. lb. .09½ -
Tetrachloride, tech., dms., c.l., works lb. .26 . -
t.c.l., works lb. .27½ . .29
tanks, works lb. .20 . -
dl-a-Tocopherol, bots kilo.134.20 . -
Acetate, bots kilo.122.00 . -
25% dry, powd., bots kilo.30.50 -32.00
Acid succinate kilo.165.00 . -
o-Tolidine, base, paste, kgs., 100% basis lb. 1.35 . -
dry, kgs., 100% basis lb. 1.40 . -
Hydrochloride, paste, kgs., 100% basis lb. 1.35 . -
Tolu balsam, cns lb. 4.85 . -
Toluene (see Toluol).
p-Toluenesulfonamide, powd., dms., works lb. .70 . -
m-Toluidine, dms., c.l., works, frt. alld lb. .79 . -
t.c.l. same basis lb. .80 . -
tanks same basis lb. .78 . -
o-Toluidine, dms., c.l., works, frt. alld lb. .23 . -
t.c.l., same basis lb. .24 . -
tanks, same basis lb. .22 . -
p-Toluidine, flake, dms., frt. alld lb. .64 . -
solid dms. frt. alld lb. .60 . .61
Toluol, coaltar, indust. or nitration, tanks, works:—
Bethlehem, Pa gal. .32 . -
Birmingham dist gal. .32 . -
Chicago, dist gal. .32 . -
Cleveland dist gal. .32 . -
Geneva, Utah gal. .26 . -
Johnstown, Pa gal. .32 . -
Lackawanna, N. Y. gal. .32 . -
Lone Star, Tex gal. .33 . -
Lorain, Ohio gal. .32 . -

Toluol, coaltar, indust. or nitration, tanks, works:—
Middletown, Ohio gal. .33½ -
Minnequa, Colo. gal. .32 . -
Philadelphia dist gal. .32 . -
Pittsburgh dist gal. .32 . -
Sparrows Point, Md gal. .32 . -
Terre Haute, Ind gal. .35 . -
Youngstown, Ohio gal. .32 . -
Petroleum, indust., 2°, tanks, works:—Albany, N. Y. gal. .35 . -
Bayonne, N. J. gal. .34 . -
Baytown, Tex. gal. .33 . -
Chicago, Ill. gal. .38 . -
Detroit, Mich gal. .35 . -
Houston, Tex. gal. .33 . -
Philadelphia, Pa. gal. .34 . -
Providence, R. I. gal. .35 . -
Wood River, Ill. gal. .34 . -
2,4-Tolylenediamine cryst., fib. dms., c.l., frt. alld lb. .97 . -
t.c.l., frt. alld lb. 1.00 . -
powd., fib. dms., same basis lb. 1.04 . -
Tonka beans, Angostura, cks. lb. No prices.
Brazilian, Surinam, cs lb. 1.35 . -
Totaquine 100-oz. lots, cns oz. .42 . -
Toxaphene, dms., c.l., t.l., works. lb. .21 . -
t.c.l., t.t.l., works. lb. .27 . -
Triacetin, dms., c.l., dlvd. E. of Rockies lb. .39 . -
t.c.l., same basis lb. .40 . -
tanks, same basis lb. .37 . -
Tributyl citrate tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .42½ -
t.c.l., frt. alld. E. of Denver. lb. .43½ -
tanks, frt. alld. E. of Denver. lb. .40 . -
Phosphate, dms., c.l., works. lb. .52½ -
t.c.l., same basis. lb. .53½ -
tanks, same basis lb. .50 . -
Tributylamine, dms., c.l., works. lb. .67½ -
t.c.l., same basis. lb. .68½ -
tanks, same basis lb. .65 . -
Trichlorobenzene dms., c.l., frt. alld. E. lb. .14½ -
t.c.l., frt. alld. E. lb. .15½ -
tanks, frt. alld. E. lb. .13 . -
Trichlorobenzene prices in the West 1¾c. higher.
Trichloroethylene, dms., c.l., or t.l., works, frt. equald lb. .12½ -
t.c.l., dlvd. E. lb. .14½ -
tanks, works, frt, equald lb. .11¼ -
1,1,1-Trichloroethane, dms., c.l., works. lb. .13½ -
t.c.l., works lb. .14¼ - .16¼
tanks, works lb. .11½ - .12½
Tricholine citrate, 85% soln., ret. cbys., works, frt. adjusted lb. 1.40 - 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd. lb. .35 . -
t.c.l., dlvd. lb. .36 . -
tanks, dlvd. lb. .32½ -
petroleum, dms., c.l., dlvd. lb. .34½ -
t.c.l., dlvd. lb. .35½ -
tanks, dlvd. lb. .32½ -
Triethanolamine, dms., c.l., dlvd. E lb. .24½ -
t.c.l., same basis. lb. .25½ -
tanks, same basis lb. .23 . -
Triethylamine, dms., c.l., works, dlvd. E lb. .49 . -
tanks, same basis lb. .46½ -
Triethyl citrate, refd., tech., non-ret. dms. c.l., frt. alld. E. of Denver lb. .45¾ -
t.c.l. frt. alld. E. of Denver. lb. .46¾ -
tanks frt. alld. E. of Denver. lb. .43¾ -
Phosphate, dms., c.l., dlvd. lb. .40½ -
t.c.l. dlvd lb. .41½ -
tanks, dlvd. lb. .38 . -
Triethylene glycol, dms., c.l., dlvd. E lb. .21 . -
t.c.l., dlvd., E. lb. .22 . -
Triethylenetetramine, dms., c.l., dlvd. E lb. .51½ -
t.c.l., dlvd. E. lb. .52½ -
tanks, dlvd. E. lb. .49 . -
Tri-isopropanolamine, dms., c.l., dlvd. E lb. .23¼ -
t.c.l., dlvd. E. lb. .24¼ -
tanks, dlvd E lb. .20¾ -
Trimethylamine 25-40% soln., dms., c.l., works, frt equald., 100% basis lb. .42 . -
t.c.l., works, frt. equald, 100% basis lb. .42½ -
tanks, works, frt. equald, 100% basis lb. .33 . -
Trioxane, pure, dms., c.l., t.l., works. lb. .50 . -
t.c.l., works lb. .51½ -
Tripentaerythritol, bgs., t.c.l., works. lb. .35 . -
Triphenyl phosphate, bbls., c.l., frt. equald lb. .40 . -
t.c.l., frt. equald lb. .41 . -
Triphenylguanidine, bbls., works lb. .90 . -
tanks, same basis lb. .18½ -
Tripropylene glycol, dms., c.l., frt. alld E lb. .20½ -
t.c.l., frt. alld. E lb. .21½ -
Tripopylene glycol prices 1c. per lb. higher in West.
Phosphate (see Sodium phosphate tribasic).
Tyrothricin, USP, bots gram. .75 - .85
dl-Tryptophane, fib. ctns., works. kilo.165.00 . -
Tungsten metal powd., 2-5 microns, dms., works lb. 4.20 . -
Turpentine, gum (see Protective Coatings market, Naval Stores).

U

Unicorn root, false (see Helonias root).
True (see Aletris root).
Urea, 46% N. indust., bgs., c.l., t.l., dlvd. E. ton.120.00 . -
t.c.l., dlvd. E, ex whse. ton.140.00 . -
45% N. agricultural, bgs., c.l., (30 tons), dlvd., E ton.105.00 . -
Urea-ammonia liquor, A and B grades N basis, tankcars, Belle, W. Va ton.126.00 . -
C grade, tankcars, same basis ton.124.50 . -
37 grade, tankcars, same basis. ton.153.00 . -
Urethane, USP, dms. lb. 1.45 . -
Uva-ursi leaves, bls. lb. .12 . .14

V

Valerian root, Belgian, bgs. lb. .35 . -
Indian, bgs. lb. .27 . -
dl-Valine, dms., works lb.21.00 -27.50
Valonia beards, 40-42% tannin, bgs., ex dock. ton.86.00 . -
cups, 28-30% tannin, bgs., ex-dock. ton.64.00 . -
extract, powd., 63% tannin, bgs., exdock, duty extra lb. .09¾ -
Vanadium pentoxide, tech., dms., works lb. 1.28 - 1.33
Vanilla beans, Bourbon, tins. lb. 7.00 . -
Mexican, cuts, tins. lb. 7.00 . -
whole, tins. lb. 7.50 . -
Tahiti, cs lb. 7.00 . -
Vanillin, ex eugenol, tins, 25-lb. lots. lb. 6.50 - 6.75
smaller lots lb 6.90 - 7.25
ex lignin, dms., 100-lb. lots. lb. 2.75 . -
smaller lots lb. 2.80 - 2.85

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There's more zinc phosphate on every rust-inhibited US Steel container—both inside and out. This extra protection gets your product to your customers cleaner, and keeps it that way longer, because US Steel's extra thickness of zinc phosphate guards against rust *even after the container is open.*

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USS STEEL DRUMS

UNITED STATES STEEL

Vinyl acetate monomer, 55-gal. dms., c.l., works	lb.	.19	—
l.c.l., works	lb.	.20	—
tankcars, works	lb.	.16½	—
tanktrucks: less than 4,000 gal., works	lb.	.17½	—
n-Butyl ether, tech., dms., c.l., works	lb.	.28	—
l.c.l., works	lb.	.30	—
tanks, works	lb.	.27	—
Chloride monomer, tanks, works	lb	11	12
Ether, USP, anesthesia, bots., 50 c.c., hospitals	bot.	1.12	—
75 c.c	bot	1.56	—
tech., dms., c.l., works	lb	.26	—
l.c.l., works	lb	.28	—
tanks, works	lb	.25	—
Isobutyl ether, tech., dms., c.l., works	lb	.28	—
l.c.l., works	lb	.30	—
tanks, works	lb	.27	—
Methyl ether, cyls., works	lb	.23	—
tanks, works	lb	.20	—

Cylinders are sold outright, or if shipped against deposit, a free period of 60 days is allowed; and if empties are returned prepaid and in good condition within that period full refund is made.

Propionate monomer, dms., c.l., dlvd	lb.	.49	—
l.c.l., same basis	lb	.50	—
tanks, same basis	lb	.47	—
Trichloride (see Trichloroethane)			
2-Vinylpyridine, 10 dms. to tanks, works	lb	1.35	—
1 to 9 dms., works	lb.	1.50	—
tanks, works	lb	1.33	—
Vinyltoluene, dms., c.l., frt. alld	lb.	.18½	—
l.c.l., frt. alld	lb.	.19½	—
tanks, frt. alld	lb.	.16	—
Viosterol in nat. vegetable oil, 400,000 to 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units		.02½	.04¾
Vitamin A acetate, syn. crystalline: beads 500,000 A units per gram, gram		.07¼	—
dry 500,000 units per gram, kilo lots	kilo.	67.50	—
325,000 units per gram, same basis	kilo.	43.88	—
250,000 units per gram, same basis	kilo.	33.75	—

Dry vitamin A acetate in less than kilo lots, $2.50 per kilo higher in all potencies.

liq., in oil, 1,000,000 A units per gram, 1,000,000 units		.10	—
palmitate, liq., 1,000,000-1,800,000 A units per gram, 1,000,000 units		.10	—
in oil, 1,000,000 A units per gram, 1,000,000 units		.10	—
B_1 (see Thiamine hydrochloride),			
B_2 (see Riboflavin)			
B complex natural (see Rice bran concentrate and Yeast)			
B_{12}, crystalline, 1-gram or 5-gram vials, gram		245.00	—
oral grade solids, in containers of 1 and 5 grams of B_{12} activity, gram		185.00	—
C (see Acid ascorbic)			
D (see Oils, codliver and fish-liver Calciferol, and Viosterol)			
D_2, dry, 850,000 units per gram, kilo lots	kilo.	42.50	—
less than kilo lots	kilo.	45.00	—
E (see a-Tocopherol and Oil, wheat germ)			
G (see Riboflavin)			
H (see Biotin)			
K, Active (see Menadione)			
K, 25 gram bots	gram	4.50	—
Violet methyl toner (see Blue methylviolet toner)			
V M&P naphtha (see Petroleum naphtha)			

W

Wahoo root, bark, bls	lb	2.25	—
dlvd	lb	1.95	—
25-49-lb lots, N. Y. or Chicago	lb.	2.05	—
5-24-lb lots, ens. N. Y. or Chicago	lb	2.15	—
Wattle bark, fair average, African bls., ex dock	ton.	95.00	-96.00
merchantable, bls. ex dock	ton.	91.00	-92.00
extract, liq., 35% tannin, bbls.	lb.	.08¼	-.08⅝
solid, S. Africa, 60% tannin, bgs. ex dock, duty extra	lb.	.09⅞	—
S. Africa, 60% tannin, bgs., ex dock, duty extra	lb.	.10	—
Warfarin, 0.5% dms., 50-lb. lots,			
Wax, amorph. (see Wax, micro crystalline)			
Bayberry, bgs	lb.	.45	.47
Bees, crude, African, bgs.	lb.	.70	Nom.
Brazilian, bgs.	lb.	.72	Nom.
Central American, bgs.	lb.	.68	Nom.
Chilean, bgs.	lb.	.72	Nom.
refd., USP, bleached, white bricks, 100-lb. ctns.	lb.	.80	.82
slabs, 100-lb. ctns.	lb.	.79	.81
yellow, bricks, 100-lbs. ctns.	lb.	.71	.73
slabs, 100-lb. ctns.	lb.	.70	.72
Candelilla, crude, bgs.	lb.	.70	.71
refd., bgs.	lb.	.73	.74

Powdered candelilla: 20 to 100 mesh, 7c higher.

Carnauba, chalky, bgs., ton lots, lots	lb.	.65	.66
North country No. 2, crude, bgs., ton lots	lb.	.73	Nom.
No. 3, Ceara, crude, bgs., ton lots	lb.	.66	.68
refd. pure, bgs., ton lots	lb.	.74	.75
tech., bgs., ton lots	lb.	.66	.67
Parnahyba, crude, bgs., ton lots	lb.	.68	.69
refd. pure, bgs., ton lots	lb.	.76	.78
yellow, No. 1, Ceara, bgs., ton lots	lb.	1.38	- 1.40
Parnahyba, bgs., ton lots	lb.	1.44	- 1.46

Powdered carnauba wax price differentials same as powdered candelilla.

Japan, cs.	lb.	.46	.47
Microcrystalline, coating grades, tankcars, works	lb.	.10	.11
laminating grades, tankcars, works	lb.	.11	.12
Montan, dom., refd., bgs.	lb.	.29	.30
imp., crude, Bohemian, bgs.	lb.	.26	.28
German, bgs.	lb.	.35	Nom.
Ouricury, refd., pure, bgs.	lb.	.85	.88
tech., bgs.	lb.	.80	.82
Paraffin (see P)			
Spermaceti, blocks, cs.	lb.	.30	.33
cakes, cs.	lb.	.31	.34
Sugar cane, dom., refd., slabs, 80 lbs. ctns., works	lb.	.65	.75
spot	lb.	67¼	.72¼
White lead (see Lead, White).			
White pine bark, rossed, bls.	lb.	.18	.19
White precipitate, USP, powd., dms.,	lb.	6.53	—
Whiting (see Calcium carbonate).			
Wild cherry bark, thin, nat., bls.	lb.	.20	—
rossed, bls.	lb.	.21	—
Witch hazel, bark, bls.	lb.	.16	.17
leaves, bls.	lb.	.27	—

Wollastonite, fine, bgs., c.l., works	ton	39.59	—
l.c.l., ex whse	ton	56.00	—
medium, bgs., c.l., works	ton	27.00	—
l.c.l., ex whse	ton	44.00	—
Woolfat, crude (see Degras), USP (see Lanolin)			
Wormseed, American, bgs.	lb.	.20	.25
Levant, bgs.	lb	4.25	4.50

45°-47°C., dms., c.l., same basis.

X

Xylene (see Xylol).			
Xylenol, cryst., 58°-60°C., m.p., dms., l.c.l., works	lb.	.40	—
56°-58°C., dms., l.c.l., works, frt. equald	lb.	.30	—
45-47°C., same basis	lb.	.212	—
l.c.l., same basis	lb	.215	—
tanks, same basis	lb.	.199	—
fraction, b.r., 7°-9°C., dry, above 227°C., dms., c.l., same basis	gal.	.96	—
l.c.l., same basis	gal.	.99	—
tanks, same basis	gal	.83	—
dry, at or below 227°C., dms., c.l., same basis	gal.	1.11	—
l.c.l., same basis	gal.	1.14	—
tanks, same basis	gal.	1.00	—
Xylidines, mixed, o-m-p, dms., c.l. or t.l., works	lb.	.39	—
l.c.l., same basis	lb	.40	—
tanks, same basis	lb	.38	—
Xylol, coaltar, indust., tanks, works:—			
Bethlehem, Pa.	gal.	.34	—
Birmingham dist.	gal.	.32	—
Chicago dist.	gal.	.35	—
Cleveland dist.	gal.	34½	—
Geneva, Utah	gal.	.29	—
Johnstown, Pa.	gal.	.33	—
Lackawanna, N. Y.	gal.	.35	—
Lone Star, Tex.	gal.	.33	—
Lorain, Ohio	gal.	.33	—
Middletown, Ohio	gal.	.34	—
Minnequa, Colo.	gal.	.34	—
Philadelphia dist.	gal.	.34	—
Pittsburgh dist.	gal.	.32	—
Sparrows Point, Md.	gal.	.34	—
Terre Haute, Ind.	gal.	.35	—
Youngstown, Ohio	gal.	32½	—
Petroleum, indust., tanks, works:—			
Bayonne, N. J.	gal.	.34	—
Baytown, Tex.	gal.	.33	—
Chicago, Ill.	gal.	.35	—
Houston, Tex.	gal.	.33	—
Philadelphia, Pa.	gal.	.34	—
Providence, R. I.	gal.	.35	—
Wood River, Ill.	gal.	.35	—

Y

Yara, yara, cns.	lb.	2.15	- 2.65
Yeast, brewer's, dry, USP, 50 int'l B units per gram, 100-lb. dms	lb.	.47	—
90 int'l B units per gram, 100-lb. dms	lb.	.52	—
200 int'l B units per gram, 100-lb. dms	lb.	.56	—
300 int'l B units per gram, 100-lb. dms	lb.	.60	—
debittered, USP, Saccharomyces, dlvd	lb.	.27	—
Torula, USP, dlvd.	lb.	.18	—

Yellow, barium chromate, CP, bbls., dlvd. N. of Tenn. and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island, St. Louis, St. Paul	lb.	.35	—

Yellow barium chromate price differentials in other States and city zones are those for chrome yellow below.

Benzidine, AAA, bbls., dlvd.	lb.	2.20	—
AAOT, bbls., dlvd.	lb.	2.45	—
Lightfast, bbls., dlvd.	lb.	3.25	—
Cadmium, CP, all shades, bbls., frt. alld. E. of Rockies	lb.	2.85	—
Selenide, lithopone, all shades, bbls., frt. alld. E. of Rockies	lb.	1.15	—

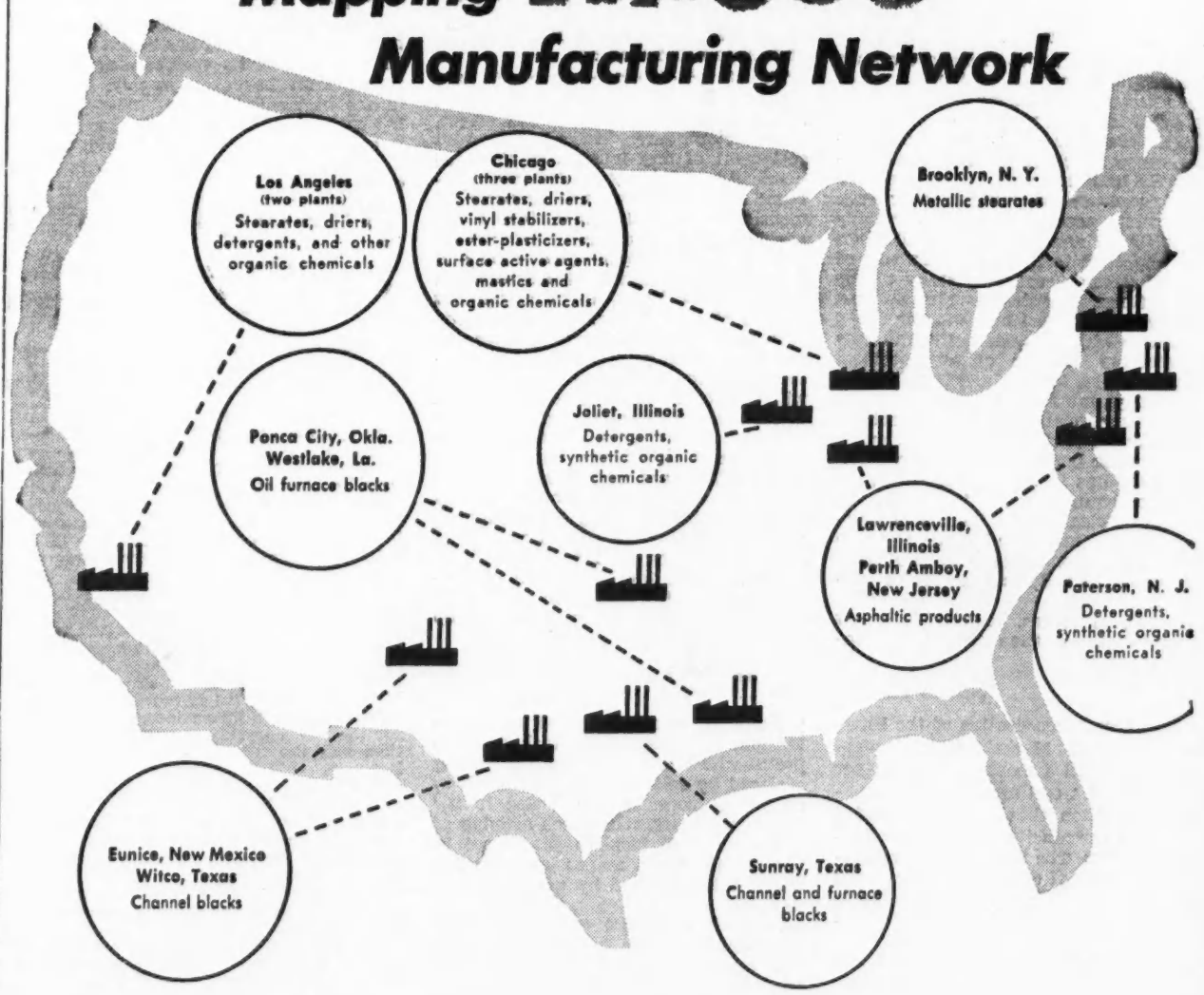
Cadmium yellows, Los Angeles and San Francisco, ex whse, 1c per lb. higher.

Chrome, CP, bbls., dlvd. N. of Tenn., and N. C. E. of Miss., including Davenport, Minneapolis, Rock Island	lb.	.35	—

Dlvd. Ala., Fla., Ga., La. (Shreveport 1¼ higher); Miss., N. C., S. C., Penna., Dallas, Tex., 1¼c higher; Ft. Worth, Tex., 1½c. higher; El Paso, Tex., 2c higher; Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c higher; dlvd. Pac. Coast, for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.

—Continued on page 45

Mapping WITCO's Manufacturing Network



Witco, and its affiliated companies, now operate a network of 15 plants, manufacturing a variety of chemicals and chemical products for a host of industries—including paint, rubber, lubricants, printing inks, plastics, cosmetics, drugs, foods, construction, textiles and paper.

Witco also maintains research and technical service laboratories in Chicago, Brooklyn, Akron and Amarillo.

Witco's 37-year history has been one of expansion, to keep pace with customers' needs, and diversification into related chemical industries.

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Inflation Must Be Avoided

Appraised in terms of contribution to the overall welfare of the tens of millions of families comprised by the population of the United States, the warning and request with reference to the threat of inflation that President Eisenhower addressed to business management and labor in his message on the state of the union are deserving of earnest positive consideration and appropriate reaction. They present, with a new breadth of national pertinence, a problem which long has puzzled all impartial analysts in respect of what should be the relation of pay and of profit to productivity.

The solving of that problem demands the cooperation on a national scale of government, business management, and labor. It is a real problem, even though the nature of the threatened inflationary consequence of its inadequate, indefinite handling may not generally be recognized—or its imminence or even probability accepted. It is not wholly or solely a financial problem; although the approach to its solution by way of the President's suggested study of the entire financial system may be the most promising. It must be given the broad attention which is essential to the fully satisfactory solution of any problem that involves, in whatsoever relativity, the always mutually contributory political, commercial, and social aspects of the national economy. That, obviously, calls for the tripartite cooperation. The President has made it clear that government cannot do the job alone. It should be clear to the leaders of business management and labor that no even predominantly governmental solution could be fully satisfactory or permanent.

It will, of course, be possible to get some measure of the essential cooperation by way of the special commission suggested by the President for a study of the entire financial system—if that study is so broadened as to provide adequate encompassing of all factors that are contributory to the problem which underlies the objective of the investigation. That means that there must be full, proper cooperation of government, business management, labor, and consumers in the planning, the programming, and the composing of the commission, in order that the handling of everything in any way related to the problem or the purpose may be as impartial as is possible in any human undertaking.

The stated objectives of labor's program for 1957 include full employment, improved social security, higher wages, and shorter hours. There has been no statement of any interest in the economically fundamental relationship between those objectives and properly dimensioned productivity. Business management is still leaning somewhat in the direction of bigger production and is progressively manifesting interest in greater productivity—in no small part by way of automation, which has been reported in one instance to have increased the daily output of a basic automotive product more than one-third with a workforce 30 percent smaller. There may be some influence of automation behind the introduction in congress of an "exploratory" bill to provide a thirty-five-hour workweek for federal employees. But, that is not the reason why the minority party in congress is at least looking in the direction of stronger backing by labor, with little, if any, regard for the nationally imperative need that inflation be avoided —at whatsoever cost to selfish group interests.

Sales Production Needed

The recent organization of the Pittsburgh Chemical Marketing Club is what one might call a movement on a spur of a general trend motivated by growing recognition that the most needed increase in production is in the production of sales. The main trend, naturally, is in areas of consumer contact; for that is where the job of supplying is finished and production is converted into profit.

Notably included in the general following of the trend is a report issued by the Chamber of Commerce of the United States on the concept that "distribution adds value, not cost, to products"; that "products have no value until they have been made available where and when the customers want to buy them, and in amounts the customer ca[illegible]." Envisioning a "better public relations climate for distribution," the report recommends that "the productivity of distribution be recognized in economic literature, government policy, and business thinking."

The more realistic observers of the need for better distribution at the consumer level know that the public relations of distribution (an indispensable necessity) are a product of contacts—and that in most instances the contacts leave very much to be desired. That shortcoming is getting a deal of recognition from management in important retail areas, and the training of sales persons is getting more and better attention, not only in its technical aspects—which are progressively being replaced by self-service—but especially on the personality side. "See to it," says one adviser, "that each member of the sales staff inspires confidence in the customer and makes her feel that she is being advised by a friendly expert."

Students of retail conditions know full well that the increases in sales over recent years were not attributable to sales service, but to what has been called "customer exuberance." They were not, therefore, surprised that the volume of business declined last year nor misled by the maintenance in large part of total value by higher prices. Nor were they surprised to learn that failures in retail businesses last year ran as much as 33 percent more than those in 1955 in certain important lines.

There is, then, nothing odd about the admitting of recognition that there has been a sad lack of attention in large retail organizations to the need for better education—not mere training—in retailing. In their recognition of that need, a group of New York retail executives is sponsoring a series of lectures at the Harvard Graduate School of business designed to develop interest in "careers" in retail distribution among high-ranking college graduates.

It is not to be expected that the careers developed by that undertaking will find direct application behind the sales counters. But, they can be, doubtless are, expected to contribute usefully to improvements needed there, by way of better training plans and procedures.

Special, as well as regular, courses at the Harvard and other business schools have been used to contribute much along the lines of the objectives of the new Pittsburgh chemical sales group. There should be developed by manufacturing groups programs similar to that of the New York retailers. If, as many qualified appraisers are ready to testify, the biggest need in production in this country is for production of more sales, it is quite evident that the productive division of business should do at least as much as the distributive adequately to provide properly qualified manpower for that production.

Coal As a Working Partner

There is at least a bit of talk going on among those who are propagating the idea that integration is good for industry with reference to the possibilities and practicality of putting the coal chemicals industry on a real coal basis. There has been some furthering of attention in that direction by the publicity given to surmises that the coking affiliates or suppliers of producers of steel would have their operations handicapped, if not curtailed, by reason of the obstacles believed to be faced by the steel industry in its expansion programs.

The fundamental question concomitant with the close integration of chemical production with some useful processing of coal is whether it would pay. There is such integration in the industry to some extent. Its expansion over more sectors of the practically boundless area of chemical production has been studied and has been effected. In the field, at its various stages, the development has come largely, but by no means wholly, from a coal-processing beginning. There is no reason why it cannot be run still more widely in reverse—if it can be made to pay, at least for itself. It has proved better than that at certain scales of volume.

The converting of coal into coke, gas, and tar is an aged enterprise. It has been practiced for many years on many scales of volume. It has practically unlimited flexibility in that respect. Hence, it would seem that a chemical enterprise of almost any size could hitch itself up with a coal supply of appropriate capacity and make good. It could use the coke for fuel, or could sell it as such. It could use the gas similarly, or set up a compressing and a domestic distributing division—if there was no local municipal works that would take it over. It could find the gas, as well as the tar and other by-products, quite useful as a chemical base material.

So, there might be more than a little to think about in the idea of setting up a chemical plant right on top of any one of the many deposits of bituminous coal that are lying in more or less idleness in various parts of this country. Close integration is one of the reasons why the petrochemical industry is growing rapidly.

Washington Talks It Over

Administration Plans to Step Up Antitrust Violation Fight By Asking Congress to Increase Agency Appropriations.

By Ralph L. Cherry
Chief, OPD Washington Bureau

The administration has laid plans to keep up its fight against antitrust law violations, and possibly expand it during the new fiscal year starting next July 1. The President has asked congress to increase the funds for the two anti-monopoly agencies—FTC and the antitrust division of the Department of Justice—by more than $816,000 over current year's appropriations.

This will not satisfy the anti-big business groups at the Capitol, however, and more likely than not they will again urge the appropriations committees of the senate and house to increase the enforcement funds above the levels recommended. What they don't like is the fact that the new budget calls for an increase in funds for the two agencies of only little more than half the increase that was granted last year.

The point they hope to make is that even with the increase of nearly $1.5 million in enforcement funds last year, the two agencies have been unable to turn the tide of corporate mergers, which is said to be running as strong as ever. Along with greater restraints on certain pricing practices, they want more crack-downs on mergers.

The new budget proposes an appropriation of $6,250,000 for the anti-monopoly work of the Federal Trade Commission in fiscal 1958, and $3,785,000 for the antitrust division of the Justice department. This is $700,000 more for the FTC than currently appropriated, and $116,350 more for the antitrust division.

Fertilizer Buying by Farms

In 1954, 61 percent of the farms in the United States reported the purchase of commercial fertilizer, costing $1,079 million, compared with 44 percent of all farms reporting $374 million spent in 1944, and 38.3 percent reporting $196 million in 1939. The proportion of farms reporting the purchase of fertilizer in the south Atlantic states.

In 1954, 10.9 percent of the farms reported purchase of lime and liming materials, costing $69.5 million, compared with 13.8 percent reporting $69.4 million in 1944, and 7.7 percent reporting $21.7 million in 1939.

Funds Asked for SBA

The Small Business Administration is running out of funds and President Eisenhower has asked congress to add an additional $50 million to its authorized revolving fund to meet estimated loan requirements during the remainder of this fiscal year.

The volume of business loans made by SBA has been substantially greater than anticipated when the 1957 budget for the agency was approved, almost a year ago, and as a result presently available funds, both for loans and for administrative expenses, will soon be exhausted.

The agency operates under a statutory limitation of $150 million that may be outstanding in business loans at any one time, and the prospects that this limit will be reached next month. This means that congress is going to have to raise this limit when it enlarges the capital of the agency.

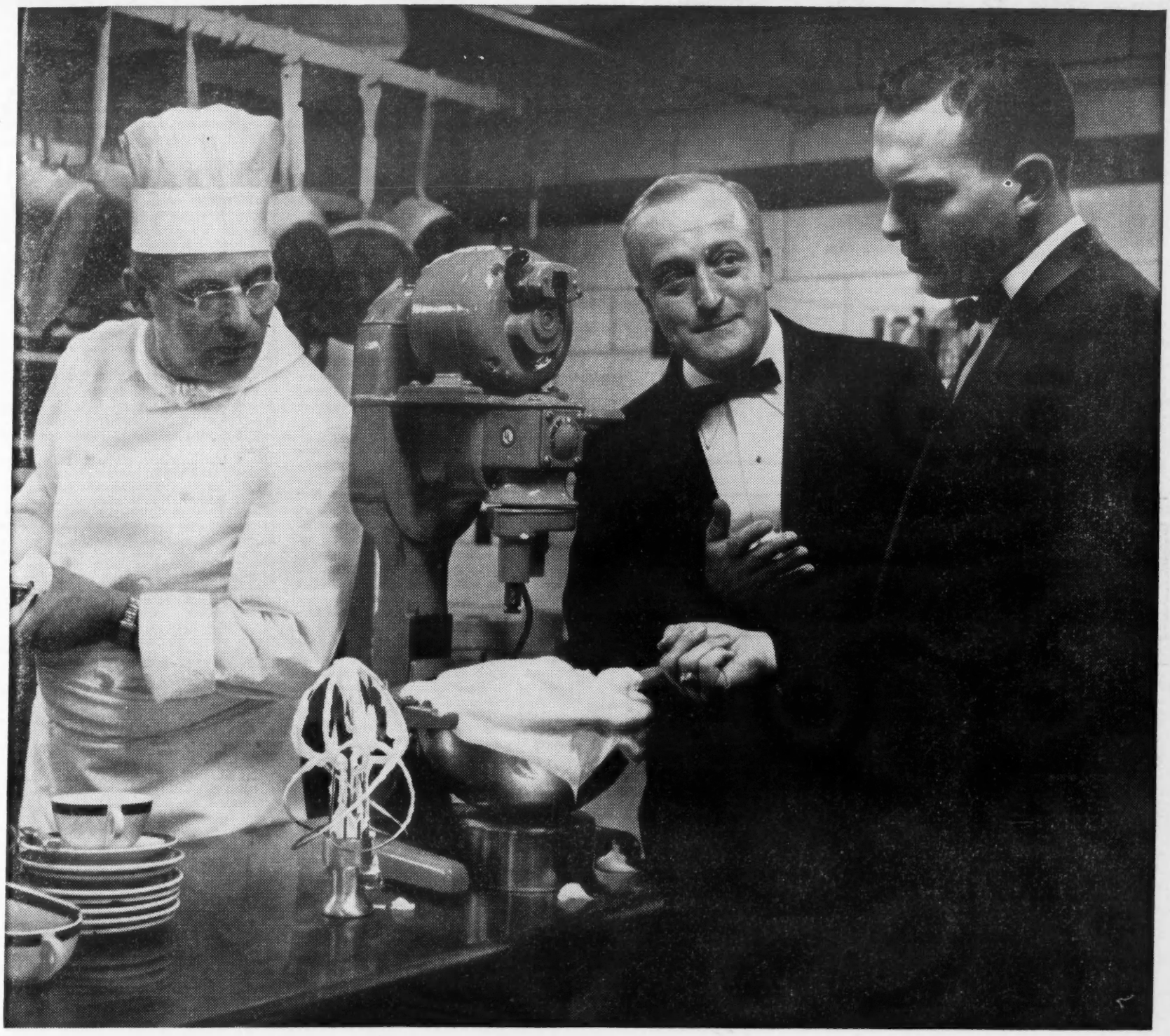
FDA Examining Dyes

The Food and Drug Administration is looking with a critical eye at four more coaltar colors which have had some degree of use in the foods, drugs and cosmetic industries. They are the FD&C yellows 1,2,3 and 4.

Investigation work by FDA scientists has turned up questionable reactions from excessive use of these colors which the agency feels make it necessary to consider withdrawal of certification for particular uses. This is the second group of colors to be so considered. It will be recalled that last year the agency withdrew approval of the orange 1 and 2 and red 32 colors for internal use, because they were shown to be hazardous under certain conditions.

The four yellows on the suspect list have been certified for use both internally and topically. The oil-soluble yellow No. 3 and No. 4 are used in butter, margarine, and other foods; yellow No. 1 is used in lipsticks; but yellow No. 2, although certified, so far as is known has not been put to commercial use.

Drug industry consumers and other users of these colors are being urged to keep the studies of the FDA in mind so that when hearings are called, which may be in the near future, they will be prepared to offer suitable testimony relative to limited permitted uses, or substitutes. Testimony along this line was notably lacking during the hearings on the orange 1 and 2 and red 32.



The mono man who doubles in vitamins

The man on the left is Joe. He's third cook at a famous hotel. Just finished working on a dinner for a meeting of pharmaceutical manufacturers. Now he's watching Bob Edwards (center), sales manager of our Oils Department, showing a fellow guest how a bit of DPi's distilled monoglycerides can make a lovely whipped-cream-like fluff out of homogenized milk. The fellow guest agrees that all this is interesting but suggests that Bob is at the wrong meeting. Bob stands his ground and points out that he's a monoglyceride salesman who doubles in vitamins.

Back in the early days when Bob started with DPi, our business was procuring tank cars of oil and squeezing out, by molecular distillation, vitamins A and E. What came out, Bob sold . . . both the vitamins and the tank cars full of de-vitaminized oils, sterols, and whatnot that were left over.

Then things changed. Now, a lot of stills are busy turning out a lot of monoglyceride emulsifiers. So Bob is busy hawking monos instead of vitamins. But, Bob happens to be a Pennsylvania Dutch Welshman who doesn't take such a change in the state of affairs lying down. When he's out peddling monos, he also carries vitamins in his hip pocket, attends the pharmaceutical meetings. Why not, he says. We believe in ourselves.

Call up with a question about monoglycerides and you'll probably get Bob Edwards. Call up with a question about vitamins A or E and you still might get Bob. Whomever you get, we'll turn the place inside out—whether it's a simple matter of a quotation, a complex technical question, but especially for an order! (We ship from stock.) ***Distillation Products Industries,*** Rochester 3, N. Y. Sales offices: New York, Chicago, and Memphis • W. M. Gillies and Company, Los Angeles, Portland, and San Francisco • Charles Albert Smith Limited, Montreal and Toronto.

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Heavy Chemicals

Hydrochloric acid prices in the Texas-Arkansas-Louisiana area were firmer last week. This was a result of a previous announcement by a producer in the Texas-Kansas area of increased prices for hydrochloric. While the advance served to strengthen an area which has long been notoriously weak pricewise, it was not expected to have much of an effect on prices in further removed areas such as the midwest and northeast. Sulfuric acid markets were firm, with the exception of the New York area, where shading was reported in some instances.

Calcium chloride replacement business was active last week, in view of the cold and snow which settled over much of the northeast and midwest. Large quantities moved to maintenance departments for use in ice and snow control on highways.

Silicofluoride supplies have become more freely available during the past few months. Reason for the loosening of a formerly tight position has been increased output by phosphate plants, where silicofluorides are recovered from phosphate operations.

Production of aluminum in 1956 surpassed the 1955 level, and fourth quarter output set a quarterly record, according to the Aluminum Association.

Preliminary production figures for November compiled by the Bureau of Census show declines in production of seven chemicals and advances in three.

Lime-soda caustic, down 18 percent, and phosphoric acid, off 13 percent, led the declines. Nitric acid edged ahead 2 percent to lead the advances.

The American Paper and Pulp Association reported production for the week ended January 12 at 95.8 percent of theoretical capacity, as compared with the revised figure of 86.7 percent for the previous week, and 101.2 percent for the corresponding week of last year.

Acid, Hydrochloric—The earlier announcement by one southwestern firm of increases in hydrochloric acid prices in its area has had a firming effect on quotations in a large part of the southwest.

Prices were increased by other firms in the Kansas area, and upward adjustments were also reported made in central and coastal Texas, Arkansas and Louisiana.

This situation was heartening news to producers of hydrochloric acid in a general area which has for years been oversupplied with byproduct material.

Manufacturers of acid in the southwest have long been faced with the problem of either moving acid at very low prices, or neutralizing it and sending it down the sewer.

The firmer market in the southwest was not expected to have much influence on markets in the rest of the country, although it was conceded that if more acid could be moved locally, there would be less price difficulty in consuming regions removed from byproduct acid supply sources.

Hydrochloric acid production in November increased to 81,262 tons, a rise of 1 percent from the 80,799 tons produced in October, according to preliminary figures compiled by the Bureau of Census.

Acid, Nitric—Movement of this material continued in strong volume during the week. Steel continued to be a major factor in the consumption pattern, due to the high rate of steel output.

Acid production in November increased 2 percent, to 196,831 tons, from 193,472 tons in October, according to preliminary figures compiled by the Bureau of Census.

Acid, Phosphoric—Production of phosphoric acid dropped 13 percent in November, to 279,192 tons from 320,709 tons in October, according to preliminary figures compiled by the Bureau of Census.

Decline in production was ascribed to lessening of demand in the agricultural field. Mixers' activity for the fall fertilizer season was fairly well wound up in October, it was pointed out.

Acid, Sulfuric—Steel, rayon, chemical, petroleum and other end uses accounted for large volume shipments of sulfuric, and tended to keep this market strong.

Preliminary reports by the Bureau of Census show November production at 1,314,675 tons, a decline of 3 percent from the 1,360,546 tons produced in October.

The New York metropolitan area continued to report an unsettled market as a result of shading in some quarters. However, other sections of the country indicated stable prices and a firm market.

Aluminum Sulfate—Prices continued without change. Demand for use in paper manufacturing remained active, and shipments moved out in large volume.

Calcium Carbide—Commercial calcium carbide production declined 2 percent in November from October levels, according to preliminary figures released by the Bureau of Census.

Production in November amounted to 92,637 tons, compared with an output of 94,472 tons during October.

Calcium Chloride—The market remained tight. Producers reported that they were moving about all they could make. Some sources reported that facilities were being taxed to capacity in an effort to keep up with present commitments.

Reason for the unusual strength in demand was the cold snap which has prevailed over most of the country, bringing with it ice and snow, and consequently increasing the need for highway ice control.

Chlorine—Demand continued strong, and most producers indicated that they were running at or near capacity in an effort to satisfy current needs.

Currently, manufacture of chlorinated organics including glycols and pesticides was a key factor in consumption. Other end uses including bleaching and water treatment were seasonally active.

November production of chlorine gas dipped 1 percent from the October level, according to preliminary figures compiled by the Bureau of Census.

Chlorine gas production in November declined to 329,457 tons from 333,775 tons produced in October.

Fluorspar—Domestic production and shipments of fluorspar increased slightly in the third quarter of 1956, according to reports to the Bureau of Mines. Output of finished fluorspar of domestic origin was about equal to production reported in the second quarter, and shipments were about 6 percent above those reported in the preceding quarter.

Total production in the first nine months of 1956 was about 11 percent greater than in the same period of 1955. Consumption of fluorspar in the third quarter declined by about 19 percent from usage in the previous three months period.

Imports for consumption, including government purchases, increased about 28 percent compared with imports in the second quarter, and were about 74 percent greater than shipments from domestic mines.

Consumption of fluorspar in all major uses declined in the third quarter. In the first nine months of 1956 consumption of fluorspar totaled 458,512 tons compared with 415,303 tons used during the similar period in 1955.

Consumption in the steel industry in the first three quarters of 1956 was about 5 percent above usage reported in the same period of 1955, and consumption at hydrofluoric acid plants in the first nine months of 1956 was about 19 percent greater than in the same period of 1955.

Soda Ash—Demand for dense ash for use in the manufacture of glass bottles was said to be running above average for this period, contrary to other years at this time.

Ordinarily, glass bottle manufacture for the summer beverage trade does not run strong at this time of year, it was pointed out.

Current buying interest from the paper industry was well sustained, but there were doubts about the future in the minds of some sources, who reported that expan-

Price Trends

Advanced

Potassium stannate, 4/10c. per lb.
Sodium stannate, 4/10c. per lb.
Stannic chloride, 4/10c. per lb.
Oxide, 1½c. per lb.
Stannous chloride, anhyd., 6/10c. per lb.
hydrous crystals, ½c. per lb.
Sulfate, 6/10c. per lb.
Tin, ⅝c. per lb.

Reduced

None.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Jan. 20 1956
103.86	103.86	103.35	101.16

For Current Prices See Page 9

Heavy Chemicals

sion by the paper industry, including opening of new facilities, has been in several cases delayed because of unfavorable business conditions.

This was not to say that paper demand had decreased; rather, buying interest has not increased at the rate expected by paper producers in some areas of the country.

Light ash continued to sell in good volume to the aluminum industry, although here too, a leveling off period is anticipated as demand becomes adequate to meet consumer needs through plant expansion.

Demand for use in manufacture of phosphates continued about the same. The strike at the works of one phosphate producer, which was going into its second month, did not have much of an effect on overall consumption.

Total crude bicarbonate equivalent output in November declined 5 percent, to 401,919 tons, from 423,468 tons in October, according to preliminary reports by the Bureau of Census.

Soda, Caustic—Buying interest continued strong on the export market owing to the continuing shortage of shipping in Europe, and consequent increase in demand for American caustic soda from Latin American countries.

Rayon and acetate producers shipped approximately 1.130 billion pounds of yarn and staple fiber last year, according to the Textile Economics Institute. This figure reflects a loss of 10½ percent compared to 1955.

However, 1956 shipments are only 1½ percent under the 1952-54 yearly average of 1,145,900,000 pounds. Consumption last year declined 15½ percent from the 1955 level, but was slightly above 1954 consumption.

Electrolytic caustic production crept ahead 1 percent in November reaching 335,306 tons, as compared with October's 332,937 tons, according to the census bureau's preliminary report.

Lime-soda caustic output declined sharply, dropping 18 percent to 27,508 tons in November from 33,584 tons in October.

Sodium Silicofluoride—The supply position for this, as well as most of the other silicofluorides, has become much less tight during the past few months.

Chief reason for the loosening supply has been heavier production. Plants engaged mainly in production of phosphates previously shut down because of overproduction of phosphatic materials are now back in operation, it was indicated.

It was pointed out that current demand is still active, although buying interest has not been stimulated much in recent months since no new large municipalities have come into the water fluoridation picture.

Sodium Sulfate—Salt cake demand from paper mills regained strength last week following recovery from the effects of the year-end letdown.

Stocks were in comfortable balance, and no imminent shortages were seen. Prices held steady and unchanged.

Tin Salts—With higher tin, potassium stannate was raised to 78.4c. to 85.3c. per pound; sodium stannate, 64.2c. to 70.2c.; stannic chloride, 79.9c. to 80.9c.; oxide, $1.06½ to $1.07½; anhydrous stannous chloride, 92.7c. to $1.421; hydrous crystals, 81c. to 82c.; and sulfate, $1.062 to $1.082.

Nonferrous Metals

Copper—Market continued quiet. Metal was listed at 36c. per pound, delivered US destinations, by primary producers.

The following figures supplied by the Copper Institute, show production, shipments, and stocks of copper metal, in tons:

World	*December*	*November*
Production:		
Crude primary	235,096	249,360
Secondary	12,952	10,204
Refined	249,859	254,377
Shipments	237,503	239,181
Stocks	353,606	345,181
United States	*December*	*November*
Production:		
Crude primary	90,909	90,573
Secondary	12,180	8,940
Refined	129,389	132,970
Shipments	99,594	114,524
Stocks	120,645	116,516

Mercury—Market remained quiet. Metal was quoted at $255 to $257 per flask, spot.

Silver—Bullion was unchanged, priced at 91⅜c. per troy ounce, spot.

Tin—Market fluctuated narrowly. Metal was quoted at $1.01½ per pound, spot, on Friday.

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Jobs & People

American Alcolac Corporation—**Dr. Herbert Weiss** has joined the company as a research chemist in its commercial research laboratory.

American Petroleum Institute—**Elmer O. Mattocks** has been made director of API's department of technical services, succeeding **Daniel V. Stroop** who will now devote all of his time to his duties as executive assistant to the institute's president.

American Viscose Corporation, Philadelphia—**Dr. Francis M. Parker** has been named to the newly-created post of director of marketing for American Viscose.

American Zinc Sales Company, St. Louis, Mo.—**William J. Bolin** has been central district sales manager for American Zinc Sales, with headquarters in Columbus, Ohio.

Bakelite Company, New York, a division of Union Carbide & Carbon Corporation—**J. L. Rogers** has been named manager of Bakelite's molding and extrusion materials department. **A. F. Sward** has been made manager of the bonding materials department, while **J. B. Knowles** has become manager of the consumer products department. **Howald L. Burpo** has been named eastern zone manager for Bakelite's film and sheeting materials division and **J. P. Raycob** has become a technical representative for that unit.

Diamond Black Leaf Company, Cleveland, Ohio—**Emil C. Gerdes** has been appointed manager of commercial products for Diamond Black Leaf, succeeding **Dr. James M. Merritt** who has resigned.

E. I. duPont de Nemours & Co., Wilmington, Del.—**John P. McAndrews** has been named by the duPont finishes division to be manager of its Marshall sales development laboratory in Philadelphia.

Eaglo Paint & Varnish Corporation, Long Island City, N. Y.—**Marvin Messinger** has joined the Eaglo Paint sales staff and will cover Manhattan.

Esso Standard Oil Company, New York—**Richard T. Jenkins** has been named assistant manager for marketing in Esso's employee relations department, while **Frank L. Barker** has been appointed an assistant manager of the firm's office services department.

Hawthorn Chemical Corporation, Wilmington, Del.—**James W. Cleary** has been made works manager of the methyl methacrylate plant which will be built by Hawthorn at Lousiana, Mo. Hawthorn is a new company formed by Hercules Powder Company and Imperial Chemical Industries, Ltd.

Hercules Powder Company, Wilmington, Del.—**J. B. Martin** has been shifted to the export department of Hercules' cellulose products department to develop export plastics. **Robert G. Clark** has been transferred to Wilmington to aid in plastics sales and promotional work. **Gregory N. Bruxelles** has been named manager of the department's office in Cincinnati, Ohio. **J. J. Coughlan** has been transferred by the cellulose products department to its Boston district office as a technical sales representative for plastics. **C. A. Borton** has been moved to New York as a technical sales representative for plastics. **Vincent E. Walsh** has been shifted to the Cincinnati office as a technical sales representative.

Hoffmann-LaRoche, Inc.—**Edward P. Bacsik, Robert H. Schmidt** and **George N. Wagner** have been appointed field sales managers. Mr. Bacsik has been named for the eastern region, Mr. Schmidt for the central region and Mr. Wagner for the coastal region.

Koppers Company, Pittsburgh, Pa.—**R. W. Vollmer** has been named to fill the newly-created position of assistant to the general manager of the Koppers engineering and construction division. **J. S. Atwood** has been appointed to succeed Mr. Vollmer as manager of the division's chemical department.

Lederle Laboratories Division, American Cyanamid Company, Pearl River, N. Y.—**C. A. Richabaugh** has been appointed assistant chief engineer for Lederle.

Mobay Chemical Company, St. Louis, Mo.—**Ray Edward Bolin, jr.,** of Mobay has left for a six-month period of training in urethane foam technology in the plant laboratories of Farbenfabriken-Bayer, A. G., of Leverkusen, Germany.

Monsanto Chemical Company, St. Louis, Mo.—**Donald F. Osenkop** has been appointed product sales supervisor for elemental phosphorus and phosphoric acid for Monsanto's inorganic chemicals division in St. Louis. **Andrew L. Smith** has been named to succeed Mr. Osenkop as the division's district sales office manager in Los Angeles.

Mutual Chemical Division, Allied Chemical & Dye Corporation, New York—**William H. Weed** has been appointed manager of Mutual Chemical's engineering department.

National Brands Division of Sterling Drug, Inc., New York—**R. L. Graham** and **Wesley F. Tibbetts** have been named assistant managers of chain store sales in the National Brands Division.

Northern Chemical Industries, Inc., Baltimore, Md.—**James C. Totman,** vice-president of Northern Chemical Industries and manager of Summers Fertilizer Company's Bangor, Me., office, has been elected majority floor leader in the Maine House of Representatives.

Nuclear Development Corporation of America, White Plains, N. Y.—**Dr. Irving R. Tabershaw,** director of New York State's Division of Industrial Hygiene since 1953, has joined Nuclear Development as director of health and safety.

Parke, Davis & Co.—**James J. Keane** has been named general manager of the Bombay, India, branch, succeeding **W. G. Lloyd,** who has retired after more than forty years with the company.

Pennsylvania Salt Manufacturing Company, Philadelphia—**Jean W. Baer** and **John H. Haslip** have been appointed to the sales staff of Pennsalt's new line of "Isotron" aerosol propellants and refrigerants.

Pittsburgh Plate Glass Company—**George P. Myers** has been appointed manager and **John A. Burke, jr.,** has been named sales manager for the Suydam Division, succeeding Mr. Myers. The latter succeeds **Stuart Brown, jr.,** who has retired after spending thirty years in the paint industry.

Smith, Kline & French, S. A.—**John R. Klopfer** has been appointed manager of this Mexican subsidiary of Smith, Kline & French Laboratories, Philadelphia.

Stanford Research Institute—**Fred B. Ortman** has been made associate director, to coordinate the broadening activities of the institute in the southern California area, following his recent retirement as chairman of the board of Gladding, McBean & Co.

Texas Gas Transmission Corporation—**James N. White** has been named assistant superintendent of design engineering. **Gerald A. Suddoth** has been appointed supervisor of compressor station construction and **James O. King** has been promoted to the post of senior staff engineer.

Wyodak Chemical Division of Federal Foundry Supply Company, Cleveland, Ohio—**George E. Tate,** Wyodak treasurer, has been named a member of the firm's board of directors.

Koppers Given Contract By Inland for Cokeovens

Inland Steel Company has awarded Koppers Company, Pittsburgh, Pa., a contract to design and build 174 Koppers-Becker combination coke ovens and auxiliary equipment at its Indiana Harbor works in East Chicago, Ind.

Two batteries of eighty-seven ovens each will be erected. The new batteries will replace two existing batteries of seventy-four ovens each. The new ovens will be the gas gun type and will be designed for coke oven gas and future blast furnace gas underfiring.

When the new batteries are completed Inland Steel will have a total of 385 ovens at the Indiana Harbor No. 2 coke plant. Each new battery will carbonize 1,870 net tons of coal per day. The new ovens are expected to be in operation the last half of 1958.

Fluorspar Water

—Continued from page 5

fluoridating device, since a large volume of total business in this chemical goes into fluoridation.

Sodium fluoride sales patterns would not be much altered by the device, it is pointed out, because a much smaller volume of this material goes into water treatment.

Other fluoride sources such as hydrofluoric acid and hydrofluosilicic acid are used by a mere handful of communities, and no tangible effects on sales are anticipated, should use of the new dissolver become general.

One firm is said to be interested enough in the new process to be preparing information on the packaging of fluorspar and aluminum sulfate in one bag.

Alum and fluorspar could be bought by municipalities in separate packages, but currently it is thought more feasible to package the two materials together. In this way, fluorine content could be better regulated. Fluorspar as a raw material contains fluorine in varying amounts.

PHS estimates that fluoridated drinking water is now available to one-fourth of the people using local public water supplies over 30 million people in more than 1,400 cities and towns.

Increase of Research

—Continued from page 7

money for basic research at such an increased level is, I believe, easily possible in spite of the shortage of scientists. The results would not go up by a factor of two with a doubled budget but the increase would be so large that this would be the greatest bargain that the American people ever received for their money!" Dr. Seaborg pointed out.

"I feel that basic research conducted by universities would be more efficiently done and more likely to reach beyond limited objective studies if lump sums of money were provided by external agencies to the general university budget or to general departmental budgets for administration in the manner traditional to university research, rather than disbursed piecemeal to small projects bearing specific titles," the speaker said.

Money Not Enough

"I should hasten to add that a generous supply of funds for basic research is not in itself sufficient. Money does not directly beget new ideas. We need to attract increasing numbers of people who are capable of creative thinking, Dr. Seaborg pointed out.

"Also I think that our universities need to revise upward the amount of help considered normal for the backing given a front line university investigator.

"Specifically as far as universities are concerned, I believe we should give some imaginative thought to a drastic increase in service facilities for the creative scientists on the campus.

"These might take the form of central electronics shops where complex instruments would be built and serviced upon order from the research man; central counting facilities with advanced instrumentation to encourage the use of radioactive tracers by all departments on the campus without its being necessary for every researcher to be a Geiger counter expert; central ordering, receiving and processing facilities for radioactive materials; central computer laboratories available to all departments of the campus; central facilities and services of general assistance to the biological scientists; etc.

"Such facilities will require money for buildings and equipment and operating budgets if they are to be adequately staffed, but the money will not be forthcoming unless it is requested and it will not be asked for if we do not ourselves realize and make known to others how important it is," the speaker said.

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Stockpiling Fund Increase Is Recommended by President

President Eisenhower recommended to congress last week that it make available $245 million for stockpiling operations by the government in fiscal year 1958. Of this amount, $130 million would be new money to be appropriated this session and the remaining $115 million would be unobligated funds left from previous appropriations.

The money would be used both to acquire additional quantities of strategic and critical materials, and to meet the cost of maintaining existing inventories. On the basis of mid-1956 prices, the President estimated the value of the stockpile in 1958 at $6,799,800,000, as compared with $6,556,200,000 in 1957.

The President explained in his budget message to congress that the $245 million would be spent in this manner: $69 million in direct open market purchases, almost entirely from domestic sources; $71 million for materials being delivered under defense production act expansion contracts, and $105 million for materials obtained through barter of surplus agricultural commodities.

He said that fifty-one of the minimum objectives for the seventy-five items on the stockpile list have now been filled, and that the minimum objectives for another eleven items are 89 percent or more complete.

Kaiser Buys U.S. Rubber's Wire and Cable Organization

Kaiser Aluminum & Chemical Corporation, Oakland, Calif., has announced purchase of the wire and cable business of United States Rubber Company.

The purchase, for an undisclosed amount in cash, is effective February 1 and includes U. S. Rubber's insulated wire and cable plant at Bristol, R. I., and its wire and cable inventories.

In addition, Kaiser will take over U. S. Rubber's nation-wide wire and cable sales organization and network of distributors as well as all Bristol plant personnel. The corporation plans to continue service without interruption to existing customers and maintain the same channels of distribution.

Corbin & Conwell Set Up; Will Market Iodine Complex

Establishment of the pharmaceutical firm of Corbin & Conwell, Inc., as the ethical drug division of the International Latex Corporation, New York, has been announced by International Latex.

The first product available for marketing in Corbin and Conwell's line of pharmaceutical products being promoted to the medical profession is "Betadine Antiseptic," a solution of polyvinylpyrrolidone (Providone)-iodine complex.

Phila. Chemical Club Elects

The Chemical Club of Philadelphia has elected E. M. Wilson president. Wendell Simmons and Jack Cram have been elected first and second vice-presidents, respectively. Also elected were Reid Malcolm, treasurer; William Bertollet, secretary, and William Boesler, corresponding secretary.

Gamma Radiation Facility

—Continued from page 7

fit of this radiation would otherwise be lost.

The radiation field from 85,000 curies of cobalt-60 now stored in the unit has been measured at 1,100,000 roentgens per hour. Since it is expected that the amount of cobalt-60 in storage will vary between 85,000 curies and 300,000 curies, the gamma field will be recalibrated as the loading changes.

Materials to be irradiated are placed in a 10½ by 10½ by 12 inch space at the bottom of a 5½ foot long concrete shielding plug. Access to the space is through a maximum clear opening of 8½ inch by 8½ inch cross-section.

Once samples have been inserted in the compartment at the base of this plug it is lowered into the unit and these samples are exposed to the intense radiation field.

Samples requiring special connections, as in a circulating loop system, cannot be irradiated at the present time because of the design of the shielding plug. However, two tubes are provided in the plug for leads to instruments in the irradiation zone.

The cobalt-60 slugs are stored in ninety-two stainless steel tubes arranged in a square pattern surrounding the irradiation chamber. The entire unit is below ground, with a top shield composed of high density concrete and lead.

Removal of the heat generated by absorption of radiation in the tubes, shield, and samples being irradiated is accomplished by an air stream flowing through the plenum around the tubes. It is estimated that almost 5,000 watts, or enough to heat two room of an average house, will be generated by the radiation heating at a loading of 300,000 curies.

Aluminum, Nickel, Copper, Steel Allotments Boosted

Office of Defense Mobilization last week set the second quarter steel, aluminum and nickel alloy allotments for "A" products two percent higher than those of the first quarter, and the copper allotments 17 percent higher.

The allotments for "A" products represent purchase authority to prime contractors and producers of specially designed military equipment for the four metals at the mill level. The allotments for the two quarters are as follows:

Aluminum, 123,090,000 pounds for second quarter, against 120,724,000 pounds for the first quarter; copper and copper base alloys, 45,101,000 pounds against 38,704,000 pounds; steel, 561,619 short tons against 552,626 short tons; nickel alloys, 9,873,000 pounds against 9,658,000 pounds.

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Agricultural Chemicals

Production continued upward in this market last week as producers further prepared for the pending seasonal period. However, the market still lacks the stability that might be offered by some knowledge of what the future holds. Most producers concede that the market will in all probability be a late one with buyers holding out until the last minute in order to profit from any late price cuts or to merely put off spending as long as possible. The extent of the buying, however, is the major concern of producers. With last season making such a poor showing, most handlers are left with heavy stocks on their hands. Another poor season would put them in an exceedingly bad position. The situation which might have been alleviated by foreign shipments was seemingly aggravated by the failure of American producers to glean large portions of the government contracts for overseas fertilizer commitments.

Price Trends

Advanced

Blood, Chicago, 50c. per unti-ton.
Tankage, Chicago, 50c. per unit-ton.
New York, 25c. per unit-ton.

Reduced

None.

Comparative Price Indexes

(100=1948 average)

Last week	Prev. week	Last month	Jan. 20, 1956
109.46	109.30	108.68	110.78

For Current Prices see Page 9

Extensive government aid in the drought areas may offer succor to the agricultural chemical industry this year, one producer has suggested. Heavy treatment of dead and dying soil in the plagued areas may result in a far better sales picture than had been anticipated. This is completely dependent, it was conceded, on how the problem is approached. If the utility of the land, however, is to be regained, there is no question that vast quantities of material will be necessary both this year and next. Much is dependent upon the amount of money alloted to the area by both state and Federal authorities.

Feed dealers in the mid-west gave strength to the blood and tankage markets and as a result offered the only price shifts in the agricultural chemical area. Chicago blood moved up 50c. to a $6 position (New York material stood at $5.25) while Chicago tankage climbed 25c. to a $6 level. The New York listing climbed with it to a $5 level from the previous $4.75. The present seasonal period for feed merchants should offer some slight strength to this area of the animal proteins market.

Pesticides as usual showed some strength in this market with sales reportedly holding a good tone and production at a good level. Foreign sales to the southern hemispheres have been very good to pesticides as had been anticipated and domestic sales also carried good strength.

A recent report on supply for this market noted that there are plentiful quantities of nitrogenous fertilizers on hand as well as potash and superphosphates. The fear is that with the anticipated lateness of the pending season, the heavy supplies might further the loss margin for dealers and producers.

Animal and Plant Foods

Anhydrous Ammonia—Preliminary figures released last week by the Bureau of Census showed that 263,506 short tons of this material was produced during November as compared with the 267,824 short tons produced during October. The November figure was two percent less than that of the month previous.

Ammonium Nitrate—The Bureau of Census noted that 172,252 short tons of this material were produced in November as compared with the October figure of 171,120 short tons. The figures reflect a one percent production advance for November.

Animal Proteins—Cold weather in the mid-west brought blood and tankage prices in those areas up last week, dealers here reported. The current listing for both out of Chicago is $6 per unit. Buyers and feed producers who are facing their seasonal period at this time. The advance in listing brought the New York price of tankage with it, advancing it 25c. to a $5 per unit listing. The Chicago blood advance had been one of 50c. while that of Chicago tankage had been 25c. per unit.

Fishmeal and fishscrap prices continued at the $142 and $138 listings. Dealers reported that supply was adequate, demand fair and the market steady. The market is still working on its stock of domestic material plus some small continued production out of the Carolinas. The first of the foreign production is expected on the spot scene soon.

January to October production for fishmeal amounted to 247,381 tons according to a report by the government. The figure is stronger than the January-October total for 1955 of 209,000 tons and also better than the 1954 figure of 213,100 tons. Imports for the same ten-month period in 1956 amounted to 83,356 tons, seven percent higher tan the 1955 total of 77,907 tons while thirty-five percent below the 1954 ten-month total of 128,888 tons.

Phosphates—The production of normal superphosphates during October amounted to 123,967 short tons as compared with the 98,278 short tons produced the month previous and the 141,457 short tons produced during the October of the year previous. Stocks on hand at the beginning of the month amounted to 209,925 short tons against the 213,232 short tons produced during September and the 202,339 short tons produced during October, 1955. Shipments totalled 75,110 short tons in October against 51,287 in the month previous and 77,481 short tons for October, 1955. Stocks on hand at the end of October amounted to 201,543 short tons against 209,925 short tons in September and 202,189 short tons at the end of October, 1955.

Potash—A recent report noted that potash consumption in the United States has been growing in a relatively steady way. With the bulk of production still emanating from New Mexico, agricultural potash use set a record during the crop year ending June, 1955, with consumption at 1,874,943 tons, an advance of 120 percent over that of 1947. Production in 1955 on a potassium oxide basis was 2,064,808 tons, and the upward trend in output and consumption was continued, to a degree, last year, though the year as a whole was disappointing to agricultural fertilizers.

In the matter of foreign trade more fertilizer was being imported than exported, though the dollar balance favoring imports is reportedly narrowing. Fertilizer exports were outstanding in 1955 when they gained 47 percent to an approximate total of 4,119,000 short tons valued at $91 million. Fertilizer imports were 2,418,000 tons at $110,197,000, major items being Chilean nitrate of soda, ammonium nitrate and mixtures and ammonium phosphates.

Pesticides

A Department of Agriculture spokesman noted that far more infested rangeland acreage warranted control to suppress grasshoppers and Mormon crickets in 1956 than was actually treated under cooperative programs. More than two million acres of grasshopper-infested rangeland were treated to prevent depredation. An estimated $37 million in cash value of crops in 22 reported states was lost in 1956 to grasshoppers and Mormon crickets and almost $38½ million was saved through voluntary and cooperative control activity.

Farmers kept grasshopper damage to crops at a minimum through the application of sprays, dusts or baits to more than 4½ million acres. The insecticides used most widely were aldrin, dieldrin, toxaphene, chlordane, heptachlor and sodium fluosilicate.

A recent report on 1955 pesticide sales noted that the low-cost fungicide copper sulfate leads in the Department of Agriculture volume breakdown of sales. Copper sulfate's total was seventy eight million pounds; the amount sold has been declining since 1950 when the figure stood at 61,800,000 pounds; the herbicide, 2,4-D vollos sigh a sales total of 29 million pounds, highest since its development.

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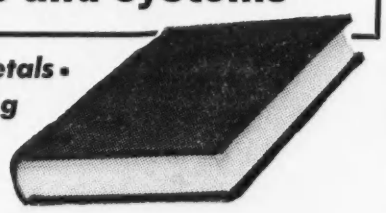

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Petroleum Derivatives

All signs continue to point to an advance in solvent prices, but an initial move in this direction has not been announced as yet. Informed sources foresee advances ranging ½c. to 1½c. per pound, with most of the materials moving up 1c. per pound across the board. As the bulk of solvent business goes to contract customers, the firm price outlook has not had a notable effect on the sales level. Sales of benzol, toluol and xylol remained at the substantial but unspectacular level that was reported during opening weeks of the year.

Production of propane rose to 170,140,000 gallons during the last two weeks of December, from 131,778,000 gallons produced in the previous two-week period, according to a report issued last week by the American Petroleum Institute. Comparable figures for butane were 72,584,000 gallons and 71,490,000 gallons, respectively. Total production of petroleum gases in the final two weeks of December was 334,767,000 gallons, as compared with 286,834,000 gallons in the previous period. Stocks of propane stood at 383,211,000 gallons on December 31. This is considered to be an adequate stockpile, even though it is considerably below the 421,673,000 gallons held in stock on December 15. Butane stocks were 153,198,000 gallons on December 31, as compared with 159,803,000 gallons on December 15.

Business volume in petroleum gases last week reached its highest point of the season in the Eastern half of the country, where in many sectors, temperatures hit a record low. Producers gave no indication that prices of these materials would respond to the crude oil advance.

Solvents and Diluents

Benzol—Market remained firm as consumers awaited announcement of an anticipated price advance. Buying interest was unchanged from the previous week. Supplies are reported to be in close balance.

Cleaner's Naphtha — This material moved last week at a moderate post-holiday pace. The next big boost in business is expected to appear in the weeks preceeding the Easter holidays.

Lacquer Diluent—Prices were very firm and as yet unchanged. The material was moving promptly on contract sales and was adequately available for spot requirements.

Toluol—An advance of about 1c. per gallon in the price of this material is almost certain to be announced shortly, according to informed sources. The forthcoming advance is not having a significant effect on the sales pattern, because in this field most of the business volume is covered by contract. Current demand is reported to be seasonably fair. The supply picture in the industry showed no change from the previous week.

Waxes

Microcrystalline—Advanced prices were posted for this item last September. In consequence, the price outlook is not as clear as in other petroleum derivatives, most of which are expected to advance. Even if this wax does move up in price, such an increase is most likely to come a month or so after prices of the more basic petroleum materials have been revised.

Good demand was reported last week for export as well as domestic consumption. Food packaging continued to provide an expanding market for sales of the material. Supplies were ample for all needs.

Paraffin—As no increases have been reported in the price of this wax since last March, producers regard the material as a bit firmer than microcrystalline and as more apt to move in accord with the crude oil advances that were recently reported. It should be noted though that in the past waxes have been slow to respond to a revision in crude oil prices, often following the latter by two or three months.

Price Trends

Advanced
None.

Reduced
None.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Jan. 20, 1956
105.71	105.71	105.71	104.32

For Current Prices see Page 9

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended December 29 totaled 264,241,000 barrels, according to data reported to the Bureau of Mines. Compared with the total of 269,909,000 barrels for the preceding week, this represents a decrease of 5,668,000 barrels, comprising a decrease of 5,107,000 barrels in stocks of domestic crude and a decrease of 561,000 barrels in stocks of foreign crude.

Lighter Fractions

Butane—The sales pace quickened last week throughout the eastern sector of the country, where in many instances, temperatures hit a record low. Producers gave no indications though that quotations would respond either to the increased demand or the recent increase in the cost of fuel oil. If the price continues to hold steady, the steadiness could be attributed to the fact that this material had already been advanced in price a short time before the crude oil increase was posted.

Propane—Supplies are still adequate in all areas despite the substantial boost in demand brought about by the sudden cold snap. The underground storage method, which was fully exploited by producers this season, apparently has proved 100 percent effective in preventing the regional shortages noted in previous seasons. As in the case of butane, there was no indication last week that producers intended to advance their price listings. On the other hand, there was no assurance either that present prices would be maintained.

Miscellaneous

Crude Oil—Current reports of the industry for the week ended December 28 indicate an increase in crude-oil production and an increase in crude runs. According to the American Petroleum Institute, the daily average output of crude (including lease condensate) was 7,392,000 barrels, an increase of 16,000 barrels from the preceding week. Daily average crude runs to stills of 8,395,000 barrels were 334,000 barrels above the preceding week, and 488,000 barrels above the week ended December 30, 1955. Runs of foreign crude amounted to 743,000 barrels daily, compared with 912,000 barrels in the preceding week. For the four-week period ending December 28, crude oil production averaged 7,369,000 barrels daily and crude runs to stills averaged 8,080,000 barrels daily with runs of foreign crude averaging 866,000 barrels daily.

Fuel Oil—Higher prices for heavy fuel oils were put into effect last Tuesday by two major producers. Along the East coast bunker C oil was advanced 25c. per barrel, and No. 4 fuel oil was increased 40c. per barrel. Advances in No. 5 ranged 22c. to 46c. per barrel.

Kerosene, Diesel oil and other light heating oil products have been increased by one company, effective January 15, by one cent per gallon in all eastern states except Ohio, where the increase was ½c. per gallon.

Gasoline—By the end of the week all major producers had raised the price of gasoline by ½c. to 1c. per gallon. In some areas the advance was confined to ½c. because of local conditions.

Commentators consider it too early to determine how firm the new price is. There are many factors to be weighed, particularly the currently heavy supplies of gasoline, but the crucial factor is the strength of crude oil, which is closely tied to developments in the Suez Canal situation.

Senator Joseph C. O'Mahoney last week scheduled an investigation by his antitrust subcommittee into current pricing policies of the oil industry. His objective was reportedly to determine what role, if any, the government should take in conducting the oil lift to Europe.

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Current Market Quotations

—Continued from page 35

Yellow, hansa, 10 g, bbls., same basis as yellow, chrome	lb.	2.35	—
G pigment, bbls	lb.	2.20	—
Iron oxide, natural, French type, bgs., c.l., works	lb.	.06	—
Peruvian type bgs., l.c.l	lb.	.0205	.0345
pure, bgs., c.l., works	lb.	.11½	—
l.c.l., works	lb.	11¾	—
Mercury, oxide, bbls., 1,000-lb. lots	lb.	5.58	—
smaller lots	lb	5.60	—
Ocher (see Yellow, iron oxide, natural)			
Zinc (chromate), bbls., dlvd	lb.	.29	—
basic, bbls., dlvd	lb.	.34	—
Yerba santa leaves, bls	lb.	.40	.42
Yohimbine hydrochloride, bots, tins	oz.	3.75	4.25

Z

Zein, bgs., 36,000-lb. lots or more	lb	.38	—
1,000 to 36,000-lb lots, works	lb	40	—
smaller lots, works	lb	43	—
Zinc acetate NF VIII dms	lb	.53	—
tech., dms., works	lb.	.29½	.29¾
Borate, bgs., c.l., dlvd E	lb.	192	—
l.c.l. dlvd E	lb	202	—
Chloride, NF, gran., dms	lb.	.42	—
precip., powd., dms	lb.	.26	—
soln. 50% dms, c.l. works 100 lbs		5.80	—
l.c.l., works 100 lbs		6.40	—
tanks, works 100 lbs		5.15	—
tech., fused, dms., c.l., works 100 lbs.		10.70	—
l.c.l., works 100 lbs.		11.20	—
gran fib dms., c.l., works 100 lbs.		11.45	—
l.c.l., works 100 lbs.		11.95	—
Chromate (see Yellow, zinc).			
Cyanide kgs. 1,000-lb. lots or more works	lb	.523	—
smaller lots works	lb.	.543	—
Dust, pigment, bbls. c.l., works	lb	.17½	—
l.c.l., works	lb	18½	—
Fluoride, bbls., works	lb.	.49	.50
Hydrosulfite, dms., c.l., frt. alld.	lb.	.22	—
l.c.l., frt. alld	lb.	.24	—
Metal, prime western slabs, E. St. Louis	lb.	.13½	—
New York	lb.	14	—
Naphthenate, liq., 8% Zn., dms., frt. Alld	lb.	.24½	—
10% Zn dms frt alld	lb.	.30	—
Nitrate, tech., cryst., bbls., works	lb	.20	—
Oxide pigment, American process, lead-free, bgs., c.l., frt. alld	lb.	.14½	—
l.c.l., same basis	lb.	15½	—
Zinc oxide, pigment, American, process, leaded, 35%, bgs., c.l., mills, frt. alld.	lb.	.15½	—
l.c.l., same baris	lb.	.16½	—
50%, bgs., c.l., same basis	lb.	.15⅞	—
l.c.l., same basis	lb.	.16⅞	—
French process, comi., green seal, bgs., c.l., frt. alld	lb.	.15¾	—
l.c.l., same basis	lb.	.16¾	—
red seal, bgs., c.l., same basis	lb.	.15¼	—
l.c.l., same basis	lb.	.16¼	—
white seal, bgs., c.l., same basis	lb.	.16¼	—
l.c.l., same basis	lb.	.17¼	—
USP, ctns., c.l., frt. alld	lb.	.17¼	—
l.c.l., same basis	lb.	.18¼	—
Zinc oxide Pac. Coast prices 1c. higher.			
Phenolsulfonate, NF, gran., dms.	lb.	.39	—
powd., dms	lb.	42	.49
Resinate, precip, 7.2-7.6% Zn., dms., frt. alld	lb.	.29	—
Silicofluoride, dms., works	lb.	.12½	.14
Stearate, tech., USP, ctns., c.l.	lb.	.41	—
l.c.l.	lb.	.42	.46
Sulfate, powd., monohydrate, 36% Zn bgs., c.l. dlvd E 100 lbs		8.75	—
l.c.l., dlvd E 100 lbs		9.75	—
Zinc sulfate in bbls. 40c higher.			
USP, gran dms	lb	26	—
Sulfide, pure bgs., c.l., dlvd	lb.	.2530	—
Undecylenate, dms	lb.	2.00	—
Yellow (see Yellow zinc).			
Zinc-ammonium chloride, bgs., c.l., works 100 lbs.		10.25	—
bbls., c.l., works 100 lbs.		10.85	—
l.c.l., works 100 lbs.		11.35	—
Zinc-formaldehyde sulfoxylate, basic, dms., c.l	lb.	.25½	—
l.c.l.	lb.	.26	—
Zircon (G), gran., bgs., c.l., works.	lb.	.03½	—
5 tons to c.l., works	lb.	.03½	—
1 ton to 9,999-lb. lots, works.	lb.	.04	—
smaller lots works	lb.	.06½	—
milled, bgs., c.l., works	lb.	.04½	—
5 tons to c.l., works	lb.	.04⅝	—
1 ton to 9,999-lb lots, works.	lb.	.04⅝	—
500-1,999-lb. lots, works	lb.	.07½	—
Zircon (G) in barrels, 1c. higher.			
Zirconium acetate, 13% com., ZrO., c.l., 30,000 lbs minimum, works	lb.	.23	—
Hydride, cns., works	lb.	7.00	8.45
Nitrate, dms., ex whse	lb.	4.50	7.00
Oxide 92½-99%, white grd., bbls. or bgs., works	lb.	1.50	—
lump, electric-fused, bgs., lump, electric-fused, bgs., c.l., works	lb.	.44	—
5-ton lots, works	lb.	.44½	—
1 ton to 9,999-lb. lots, lbs., works	lb	.45	—
CP white, grd., bbls., or bgs., works	lb.	1.50	—
lump, electric fused, bags, 500 to 1,999-lb. lots, works	lb.	.45½	—
smaller lots, works.	lb.	.48	—
milled, electric-fused, bgs., c.l., works	lb.	.50	—
5-ton lots, works	lb.	.59½	—
1 ton to 9,999-lb. lots, works	lb.	.60	—
500 to 1,999-lb. lots, works	lb.	.60½	—
smaller lots, works.	lb.	.63	—
Oxychloride, cryst., ctns., 5-ton lots, works	lb.	.35½	—

APMA Unit to Hear

—Continued from page 7

Pinion Company; Stuart M. Campbell, partner in Booz, Allen & Hamilton, management consultants; Lloyd Russ, director of executive development of Westinghouse Electric Corporation; Forrest Wallace, managing director of the midwest office of McKinsey & Co., management consultants; Ralph Winslow, marketing vice-president of Koppers Company, and Dan J. Forrestal, public relations manager of Monsanto Chemical Company and president of the Public Relations Society of America.

Two panels, one on "The Common Cold" and the other on "Current Problems in Export," will be held during the afternoon on February 11. The first panel will consist of Dr. Robert Herwick, of Baxter Laboratories; Robert Coghill, of Abbott Laboratories; Dr. Thomas G. Wald, of Lobund Institute of the University of Notre Dame, and Dr. George G. Jackson, of the College of Medicine of the University of Illinois.

Robert A. Hardt, vice-president of Hoffman-La Roche, Inc., and chairman of the organizing committee, Pan American Congress of Pharmacy and Biochemistry, will speak on "The Challenge and Opportunity of the Pan-American Congress" prior to the export panel discussion. W. R. Jeeves, vice-president and director of overseas operations of Parke, Davis & Co., will moderate the discussion. Evan Spalt, of Ortho Pharmaceutical Company, will be chairman of the export section.

Rep. Walter H. Judd of Minnesota, a member of the house foreign affairs committee, will speak on "Your Stake in Foreign Affairs" at a conference luncheon February 12.

Panel Planned

Marketing and production sections will meet the afternoon of February 12. A panel discussion, "Improving Management's Effectiveness in Marketing" will be held under the chairmanship of George W. Orr, jr., president of Ames Company, Inc.

In the production section, J. W. Hackett, director of engineering of Owens-Illinois Glass Company, will talk on "Glass Containers of Tomorrow" and Edward M. Wixted, industrial engineering manager for Schering Corporation, will discuss "Flexible Production and Packaging Layout."

The production section will be directed by E. A. Sommers, of Standard Pharmacal Company, chairman, and Frank J. Messman of William S. Merrell Company, vice-chairman.

An address by Dr. Robert K. Cutter, president of Cutter Laboratories and top executive of APMA, will highlight the president's banquet, which, with the president's ball, will round out the activities of the second day. The closing luncheon February 13 will feature a talk by J. Roger Deas, special representative of American Can Company, on "Management's Broadened Responsibility."

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Aliphatic Organics

Corn syrup graded 42° Beaume rose 5 cents per 100 pounds last week, while technical amyl acetate with distillation range from 125° to 150° C. advanced ½ cent per pound. Both increases were applied evenly across the board. Producers said corn syrup was priced higher in order to offset increases in railroad freight rates. The amyl acetate in this distillation range, for a long time in short supply due to the scarcity of raw material fusel oil, was no longer in heavy demand. The higher boiling ketones, butyl acetate and ex pentane amyl acetate had largely displaced its old market. The decline in trade in penicillin, for manufacture of which this material was used as an extraction medium, also trimmed its market.

Along with the recent 2½ cents per gallon increase in ethanol, differentials on special denatured formulations were increased by 2 cents per gallon to 7 cents per gallon. The differential for the anhydrous form of proprietary solvent was also increased to 7 cents per gallon.

Some sales of blackstrap molasses at New Orleans were recorded at ½ cent per gallon less, but most were quoted at the old figure. Demand at New Orleans was slow as buyers marked time pending the imminent appearance of the new Cuban crop material on the market. Buying was on a hand to mouth basis at middle western feed mixing centers. Blackstrap demand was moderate at New York, slow at New Orleans. Supply was adequate at both points.

Butadiene was currently in balance. Trade sources expected supply to tighten in the first half of 1957, becoming very tight by April. Substantial new production capacity should make its impact on the market in the second half, they said, and provide abundant supply. Trade on long-term contracts was in heavy volume. There has been no appreciable spot market for butadiene for the past six months.

Association of American Soap and Glycerine Producers' data on glycerine in November indicated a sharp decline in imports, a moderate reduction in production and exports, a dip of more than 1.8 million pounds in apparent domestic consumption and a slight increase in producers' stocks.

Competitive factors were expected to retard development of a new market application for methanol as a gasoline additive, but there was heavy support for expansion of its use in automobile cooling systems as a water absorbent and antifreeze compound.

Isopropyl alcohol was moving in some volume for use as a jet-injection fuel for aircraft, but the strong preference in this application was for methanol.

Acetic Acid—Production of both natural and synthetic acid in October was the greatest reported in any month since January, 1956, Tariff Commission figures indicated. The commission put October production at 47,622,621 pounds of synthetic and 1,720,000 pounds of natural, a total of 49,342,621 pounds of acid. These figures brought the cumulative totals for the first ten months in 1956 to 438,092,815 pounds synthetic, 19,112,000 pounds natural and 457,204,815 pounds of acid of both kinds.

Synthetic output in twelve months in 1955 amounted to 514,330,588 pounds.

Acetone — Even balance characterized this market. Dealers reported that prices had strengthened during the past six months and were now regarded as quite stable. Supply, expanded by material coming onto the market as a by-product of the cumene process for manufacture of phenol, was now generally adequate. Demand was rather strong.

Amyl Acetate—Currently in effect, prices on technical material distilling at between 125° and 150° C. were advanced ½c. per pound across the board. Quotations, with freight allowed east of the Rockies, were now 16c. per pound in tanklots, 18½c. per pound in carlots and 19½c. per pound in less carlots.

This ester had been in scarce supply until recently due to the limited availability of raw material fusel oil. The shortage was not at present very noticeable, however, demand having declined. Once a common solvent for lacquers, amyl acetate has given ground to the higher boiling ketones, butyl acetate and ex pentane material. Another factor in the easing of the market was weaker demand for penicillin. Amyl acetate previously was used extensively as an extraction medium in production of penicillin.

Price Trends

Advanced

Amyl acetate, tech., dist. 125° to 150° C., ½c. per lb.
Corn syrup, 42° Be., 5c. per 100 lbs.
Ethanol, SD formulations, differential for anhydrous alcohol base, 2c. per gal.

Reduced

Molasses, New Orleans, ½c. per gal.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Jan. 20, 1956
130.87	*130.80	130.81	131.00

* Revised

For Current Prices see Page 9

Butadiene—Supplies were in balance with current demand, producers reported. A fairly tight market was projected for the first six months of the year, becoming very tight by April. This projection, however, was predicated on continued high level production in the automotive industry, a conjecture about which some trade sources were skeptical.

Long supply was predicted in the second half, when substantial new production capacity is expected to be in operation. Capacity was slated to be increased by 30 or 40 percent by year's end. Facilities for rubber polymerization were being expanded in phase with those for production of butadiene.

Output has been increasing gradually with time. Since most of it was coming from arbitrarily scheduled dehydrogenation of butane and butylene, volume of production was quite flexible. Some butadiene, coming on as a byproduct of certain petroleum cracking operations, was not readily controlled volumewise, but this material represented only a very small fraction of the entire market.

About 90 percent of sales was now attributable to use of butadiene in manufacture of GR-S type rubber. The balance was moving into production of nitrile type rubber polymers, various latices in demand in the paint industry and in manufacture of diverse special polymers, including nylon manufacture.

Virtually all trade was based on long-term contracts. There has been no appreciable spot market for the past six months. Latest quotations heard on spot material, prior to this period of inactivity, were 15½c. per pound. At that time, it was said that some sales were transacted at 14½c. per pound, but this report could not be confirmed.

Producers said that cost factors prohibited any substantial reduction in butadiene prices similar to the price concession being made to rubber companies by manufacturers of styrene monomer.

Carbon Disulfide—Production amounted to 44,121,356 pounds during October, the Tariff Commission reported. It was 42,233,904 pounds in the month previous. Total output for the first ten months of 1956 came to 462,329,908 pounds. In entire year 1955, some 564,730,676 pounds was produced.

Corn Syrup — Syrup graded as 42° Beaume was advanced 5c. per 100 pounds across the board in order, producers said, to offset increases in railroad freight rates. Current quotations on this material in non-returnable drums were now $7.30 per 100 pounds in carlots and $7.45 per 100 pounds in less carlots.

Ethanol—Material was moving through consuming channels in heavy volume to meet numerous and diverse end uses. Production was maintained at a high level. Available supply was adequate to satisfy demand in most areas without delay. Producers' stocks were maintained in normal volume at most points.

For material mixed in accordance with special denaturing formulations, the price differential for anhydrous alcohol base was returned to the formerly prevailing 7c. per gallon. Leading producers had been quoting the differential at 5c. per gallon in recent months. The 7c. differential was quoted again effective January 1.

The differential for the anhydrous form of propriety solvent was also increased to

Aliphatic Organics

7c. per gallon acress the board. This material was now quoted at 57c. per gallon in tanklots, 73c. per gallon in carlots and truckloads and from 78c. to 84c. per gallon in less carlots and less truckloads, all prices on a delivered basis.

Ethyl Silicate—The recent 5c. per pound reduction in prices of 40 percent material and condensed ethyl silicate was expected to broaden the market for this compound. Supply was ample, and there were production facilities aedquate to meet substantially increased demand. The silicate was in trade in moderate volume as a mold binder for use in manufacture of investment castings. Producers said that heavier demand for it for use as a binder in specialty refractories, heat-resistant paints and catalyst pellets was anticipated.

Ethylene Glycol—Tariff Commission reported that 95,493,913 pounds of ethylene glycol was produced in October, nearly 5 million pounds more than the output of any other single month in 1956 up to that time. Production in the month previous was 89,261,069 pounds.

Cumulative total output for the first ten months of 1956 was brought to 841,790,916 pounds. Production in all of 1955 was 888,360,747 pounds.

Formaldehyde—Lively trade in phenolic, urea and melamine resins continued to give this market a firm tone. Competition was strong now. Production was generally adequate, and additional production facilities were under consideration. The new price schedule put into effect at the first of the month was regarded as being on firm ground.

Formic Acid—Tariff Commission released data indicating that production of formic acid amounted to 1,312,513 pounds during October. That brought the cumulative total for ten months in 1956 to 12,764,330 pounds. Output in September was 1,173,159 pounds. Production in twelve months of 1955 added up to 15,594,016 pounds.

Hexamethylenetetramine—Output during October was 2,533,887 pounds, the Tariff Commission reported. The corresponding figure for the month previous was 2,220,546 pounds. Total production for the first ten months of 1956 added up to 24,890,655 pounds, in contrast to 20,007,249 pounds turned out in twelve months in 1955.

Isopropyl Alcohol—Some sales were reported for use of this material in an isopropyl alcohol-water mixture useful as a jet-injection fuel to promote rapid acceleration of aircraft in takeoff. The same principle was applied in some instances in use of this mixture as an automotive gasoline additive designed to permit a faster pickup, especially in cold weather. The market via these outlets was limited, however, due to a strong preference for methanol-water mixtures for these purposes.

Methanol — Demand continued very heavy last week. Producers reported that no uneven spots had appeared in the demand pattern attributable to the January 1 price advance of 2½c. per gallon across the board.

Molasses—The price of blackstrap at New Orleans, which rose 173 percent during the past year, began to slip last week. Agricultural Marketing Service reported quotations in a range from 27½c. to 28c. per gallon, compared to the flat 28c. per gallon—the apex of the year-long rising trend of 1956—reported for several weeks previous.

Demand at New Orleans, long described as slow to moderate, was now called simply slow. Buyers generated very little new business. Marketing of the new Cuban crop blackstrap was imminent, and this appeared to be a heavy retarding influence on trade.

Demand was slow to moderate at middle western feed mixing centers, where consumers were reported to be buying on a hand to mouth basis only.

The New York quotation remained unchanged at 29c. per gallon, the highest price brought at that point in 1956. Demand there was moderate.

Supply was adequate at both New Orleans and New York.

Pentaerythritol—Producers turned out 5,894,482 pounds in October, the Tariff Commission reported, more than they produced in any other month in 1956 up to that time. Output in the month previous was 5,048,628 pounds.

For the first ten months in 1956, the cumulative total was brought up to 52,416,788 pounds. Output in entire year 1955 was 65,110,317 pounds.

Small Business Credit Legislation Is Introduced

Sen. John Sparkman, of Alabama, chairman of the senate small business committee, last week introduced two bills to ease the gap in credit facilities for small concerns.

One bill would set up a system of national investment companies to make long-term loans or invest in the stock of companies needing capital to expand operations or market new products. The other bill would permit the Small Business Administration to guarantee small business loans of private banks up to 90 percent of the loan.

Bids Wanted

Aluminum hydroxide, 4,600, 1-gal. bots., gel, inv. A-269, Jan. 25, Vets. Adm., Procurement Div., Vets. Adm. Bldg., Washington 25, D.C.

Barium sulfate, 3,402 10-lb. cans, inv. A-269, Jan. 25, Vets. Adm., Procurement Div., Vets. Adm. Bldg., Washington 25, D.C.

Diethyl ether, 900,000 lbs. bulk, inv. 74, Feb. 4, Naval Powder Factory, Navy Dept., Indian Head, Md.

Dipentene, 6,630 gals., inv. (4)-1178, Jan. 24, Gen. Stores Supply Office, 700 Robbins Ave., Phila. 11, Pa.

Fertilizer, 440,000 gals., liquid, 21% nitrogen, 300,000 gals. liquid, 32% nitrogen, inv. DA-11, Jan. 28, Purchasing & Contracting Office, Bldg. 29, Fort McPherson, Ga.

Insecticide, 36,000 lbs., lindane, powd., dusting, inv. 655, Feb. 1, Navy Purchasing Office, Navy Dept., 3rd Ave & 29th St., Bklyn. 32, N. Y.

Linseed oil, 20,770 gals., drying, inv. 1220, Feb. 4, Gen. Stores Supply Office, Navy Dept., 700 Robbins Ave., Phila. 11, Pa.

Methyl ethyl ketone, 30,590 gals., inv. 93, Jan. 23, Armed Services Petroleum Purchasing Agency, Washington 25, D.C.

Methyl isobutyl ketone, 48,890 gals., inv. 93, Jan. 23, Armed Services Petroleum Purchasing Agency, Washington 25, D.C.

Nitric acid, 1,540 40-gal. dms., tech inv., 562, Feb. 12, Purchasing & Contracting Officer, Redstone Arsenal, Huntsville, Ala.

Paint, 2,820 gals. semigloss enamel, inv. (4)-1239, Feb. 6, 2,791 gals. heat resisting, aluminum type paint, inv. (4)-1254, Feb. 6, 2,624 gals. emulsion type rubber paint, inv. (4)-1527, Feb. 6, 16,612 qts., inv. 1208, Feb. 4, 2,960 gals. semigloss enamel, inv. (4)-1205, Feb. 4, 2,319 gals. interior oil paint, inv. (4)-1221, Feb. 4, 3,016 gals. heat resistant aluminum type paint, inv. (4)-1219, Feb. 4, 16,289 gals. exterior and interior gloss enamel, inv. 1218, Jan. 31, 22,780 gals. ship interior enamel, inv. 1213, Feb. 4, 2,520 gals. interior deck enamel, inv (4)-1210, Feb. 1, 10,648 gals. exterior oil paint, (small business only), inv. 1216, Feb. 4, 3,700 gals. interior finish flat paint, inv. (4)-1207, Feb. 1, 20,850 gals. turpentine, inv. 1215, Feb. 4, Gen. Stores Supply Office, Navy Dept., 700 Robbins Ave., Phila. 11, Pa.

Rodenticide, 3,734 2-oz. cans, warfarin, inv. 651, Jan. 24, Navy Purchasing Office, Navy Dept., 3rd Ave. & 29th St., Bklyn. 32, N.Y.

Sodium chloride, 200,000 lbs., tech., evaporated, inv. 594, Jan. 28, Navy Purchasing Office, Navy Dept., Naval Supply Center, Norfolk, Va.

Sodium phosphate, 7,296 lbs., glossy, 56,400 lbs. same, tribasic, inv. DA-2974, Jan. 22, Gen. Services Adm., Business Service Center, 1114 Commerce St., Dallas, Tex.

Xylene, 30,515 gals., inv. 93, Jan. 23, Armed Services Petroleum Purchasing Agency, Washington 25, D.C.

Cokeoven on Taiwan

—*Continued from page 4*

for one year of local operating personnel. Negotiations on such a contract are under way.

The Curran firm was selected because of its extensive experience in the development, engineering, construction and operation of horizontal-type coking ovens. This type of oven was deemed best for the kind of coking coal available in northern Taiwan, upon the recommendation of ICA's consulting engineers, Tudor Engineering Company.

The Tudor firm recommended the horizontal-type oven with a partial byproduct recovery plant rather than a vertical slot oven and a complete recovery plant.

About 40 percent of the coke produced will be used for the manufacture of urea nitrogen fertilizer, some 30 percent for the manufacture of calcium carbide for acetylene and cyanamid fertilizer, and the balance for other uses including blast furnaces and foundries. Coke in Taiwan is now principally produced uneconomically in "beehive" type ovens.

Technical Training

—*Continued from page 7*

sion, Shell Chemical Corporation; "Men for Agricultural Progress," Dr. S. B. Freeborn, Provost, University of California; "Money for Agricultural Progress," Earl Coke, vice-president, Bank of America, and former assistant Secretary of Agriculture; and "Credit for Agricultural Progress," J. A. Walker, general credit manager, Standard Oil Company of California.

March 7—Association committee meetings and conferences.

March 8—Fred Shanaman, president, Pennsylvania Salt Manufacturing Company of Washington, paper on the outlook for return on investment in the agricultural chemicals industry; discussion by representatives of government agencies on where growers and industry stand today under the Miller amendment; a report on the latest developments in forest pest control; and a presentation of the current work of the NACA.

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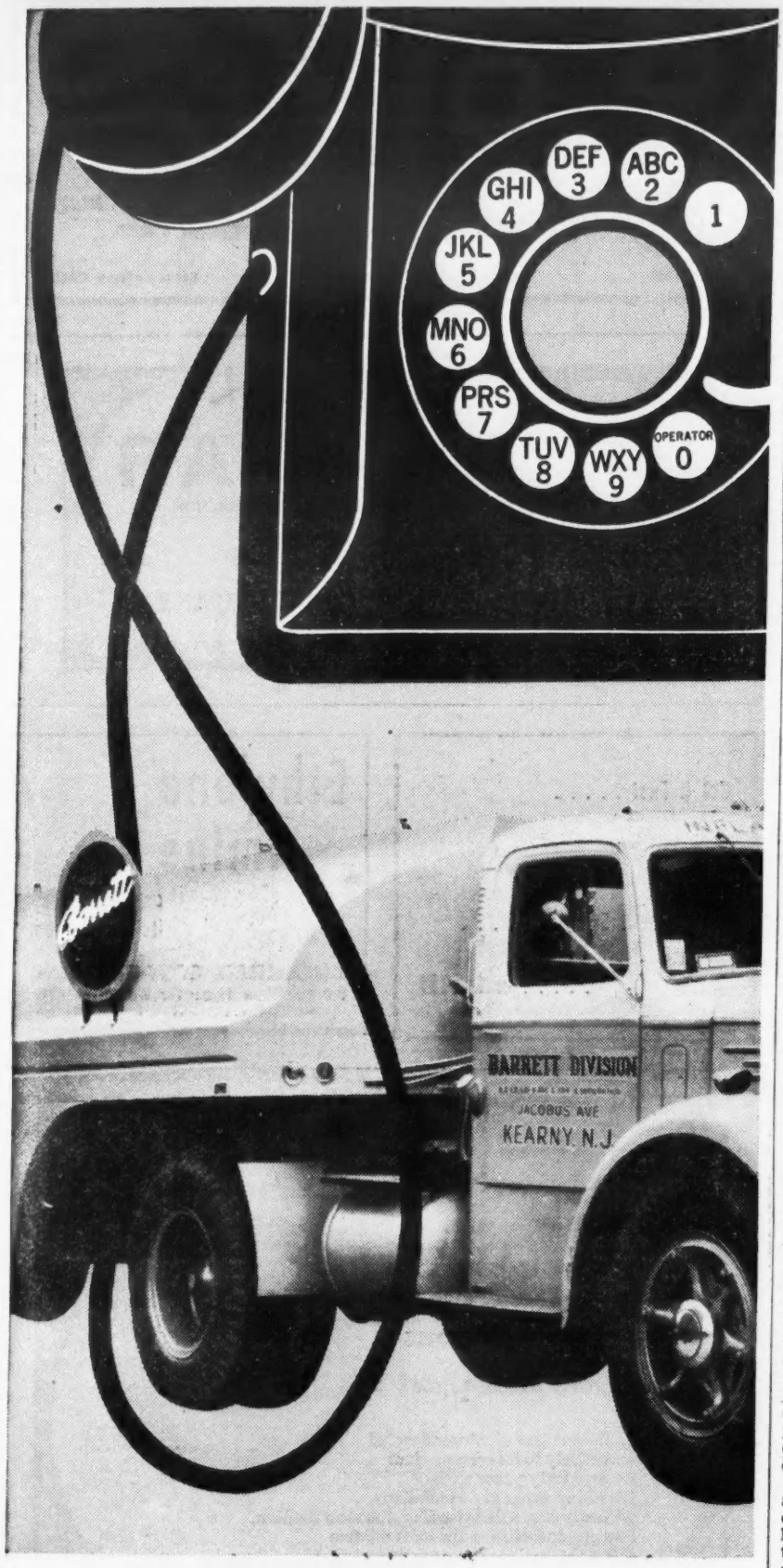

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Coal Chemicals

Most of the heavy volume chemicals in this market were moving well last week in brisk trade. Benzol's strength was undiminished. Xylol was in a sold up position. Cresylic acid and the cresols were in balance. Styrene monomer was improved. Creosote, still long on inventory, was in somewhat greater demand. Phthalic anhydride was picking up, a trend that ultimately would be reflected in the demand for naphthalene, which was rather sluggish. Phenol was off a bit, in particular the natural output. Toluol was traded too slowly to move currently heavy production. The picolines were very strong. Pyridine was moving slowly and in limited volume.

Fourth quarter 1956 went into the record books as the one in which more steel was produced than in any previous quarter, American Iron and Steel Institute reported. Output was better than 100 percent of capacity in twelve consecutive weeks during the period. The figure for the quarter was 32,444,013 net tons, compared to 31,251,967 tons turned out in fourth quarter 1955 and the biggest fourth quarter recorded up to that time.

Included was a record high December production figure of 10,840,000 net tons.

The 1956 total was put at 115,218,604 net tons, an annual figure second only to the 117,000,000 tons turned out in 1955. (The 1956 total was reached in spite of the general strike of last summer.)

The institute said that the industry planned to spend a record $1.7 billion to expand its facilities in 1957, compared to $1.2 billion spent for the same purpose in 1956. It would be the fifth recent year that the outlay for expansion of steel capacity has exceeded $1 billion.

In the eleven years 1946 through 1956, inclusive, the industry spent $8 billion for expansion.

The institute estimated that steel production in the week ended January 20 would amount to 98.3 percent of theoretical capacity, equivalent to output of 2,517,000 tons of steel. The figure was compared to steel production of 2,519,000 tons in the week previous, 2,525,000 tons in the comparable week one month ago and 2,437,000 tons in the corresponding week one year ago.

Price Trends

Advanced
None.

Reduced
None.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Jan. 20, 1956
118.31	118.31	115.56	114.80

For Current Prices see Page 9

Basic Products

Benzol—Producers reported that demand was as strong as ever last week. With cokeoven output at or near capacity, petroleum output heavy and imports appearing in substantial volume, all material was moving promptly into consuming channels. Some trade sources had expected a moderate easing of demand to show up in the market this month on the theory that the heavy buying of fourth quarter 1956 was partly due to speculative influences and not entirely justified by end product consumption. No such slackening of trade could be discerned up to the end of last week, however.

The automotive industry was operating at the manufacturing level on the basis of a strong market. In some localities, however, there were reports that automotive sales were disappointing at the consumer level. These reports were local and scattered, though, and were in sharp contrast to optimistic views expressed in other areas. For the present, the industry was providing sturdy support for the benzol market.

Phenol manufacture was absorbing benzol in fairly sizable volume, but this outlet was somewhat short of expectations in some quarters.

Styrene monomer was stronger, moving notably well into the plastics industry and getting a lift from the automobile makers. Pesticides, dyes and general solvent uses also were taking a considerable volume of benzol off the market.

With demand holding up at the current level and other factors constant, producers said that the imported material now coming in was needed to satisfy consumers' immediate requirements and was in no way weakening the domestic market.

Prices, long unchanged, were regarded as quite firm.

Creosote—Improved trade has been reported here recently. Consumption was still too slow to move the heavy volume of production plus imports, but inventories were not growing as fast as they had been, trade sources said. The key market outlet, crossties for railway roadbeds, was absorbing creosote at a somewhat better rate. Lesser markets, poles and pilings, were holding up in strength.

If the tense international situation were to prevail for long, producers said, it was likely that imports would decline precipitously. Foreign material has been coming in at a very heavy pace. The trend could be reversed if Europe were obliged to burn it in substantial volume for fuel, something to which the Europeans have had recourse during previous periods of international tension.

The price increase initiated January 1 had become industrywide and was matched by quotations on imported creosote. The price situation was currently characterized by stability, in the view of most industry sources.

Cresylic Acid—Most cuts marketed in substantial volume were in balance last week. Poorer grades were moving particularly well for use in manufacture of gasoline additives.

High-grade coaltar acids rich in meta-para isomers were fighting heavy competition from foreign material, faced with the fact of sharply curtailed production of tricresyl phosphate. TCP prices were reduced in the week before last. Some trade sources thought that the effect might be that TCP would recapture much of the business lost recently to lower priced plasticizers, chiefly the phthalates. A stronger market for TCP would carry direct benefits for the coaltar acids meeting tighter specifications, they said.

Supplies were altogether adequate, with production being maintained at very high level.

Naphthalene—Supplies of crude were still more than ample. The strengthening demand for use in manufacture of phthalic anhydride was counted on for some additional business. Phthalic was picking up markedly but, to date, not as fast as had been expected. Some trade sources thought the trade in phthalic would be accelerated gradually over a period of several weeks.

There was no spot market in imported material. Under contract, fairly heavy shipments continued to arrive from Europe, this aspect of the trade being little affected by the Suez crisis, short supply of ocean bottoms and higher ocean freight rates.

Phenol—With heavy captive consumption exerting considerable pressure in favor of equilibrium, cumene process material was readily absorbed as fast as it was produced. And production was reported at or near capacity.

Natural phenol was a bit slower in recent weeks.

Picolines—Market strength was noted last week with respect to all isomers, particularly in trade in the gamma fraction, which was in heavy demand for export. Both the alpha and beta isomers were moving very well.

Pitch—Trade in coaltar pitch was supported by announcement that Korea, un-

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ending Jan. 20 was as follows:

Ammonia liquor	lbs.	979,055
Ammonium sulfate	lbs.	41,688,786
Benzol	gals.	3,726,725
Coaltar	gals.	18,317,800
Creosote	gals.	710,604
Naphthalene, crude	lbs.	3,963,593
Pyridine	lbs.	14,212
Toluol	gals.	821,143
Xylol	gals.	238,868

Coal Chemicals

der authorization of International Cooperation Administration, would purchase $1.1 million worth from world sources. Contracts were due for final negotiation prior to May 30 and would commit suppliers to complete delivery not later than November 30. Scarcity of shipping and its high cost since the Suez crisis appeared, however, would offer serious obstacles to competitive bidding on the part of domestic producers.

Pyridine—This market, caught in a cost-price squeeze, was beset by severe competition from low priced imported material and heavy preference for substitutes that have displaced pyridine's once strong market position. Production was only moderate, but even the limited material available was moved with difficulty.

Toluol—Last week's market continued to reflect the surplus of production over demand. The pattern of consumption was fundamentally unchanged from that observed a year ago. Government purchases for stockpiling were moderate. Old customers in the paint industry, lost when adequate substitutes became available at low prices, were still getting by without toluol. Production remained at a very high level consistently.

The export market, at other times an attractive outlet for surp'us toluol, had lost much of its appeal. For one thing, a lot of European material—most of it from the eastern side of the Iron Curtain—was being dumped in Western Europe, depressing prices there. Added to this baneful influence, the Suez crisis has put a severe squeeze on tankers and jacked up Atlantic freight rates out of reach of most highly competitive products.

Loss of foreign markets was compensated in large part by increased demand for high octane gasoline for both military aircraft and automotive consumption. Surplus material was being retained in the gasoline stream at petroleum producers' plants in considerable volume.

Quotations on domestic toluol have been unchanged since an adjustment was made locally last summer for technical reasons of competitive balance. They were steady currently and not expected to undergo further revision at least until the end of the first quarter.

Xylol—The market continued very strong last week. Cokeoven producers were able to move all the material they could get, with coking operations at a very high level. Demand was substantially greater than the supply made available from this source, providing a market in good volume for petroleum producers. Flexibility of production from all sources, taken together, gave consumers assurance of adequate supply with little or no delay on deliveries.

Intermediates

Aniline—Demand for aniline has been poor, the market having gone abruptly into decline last spring, but current prospects were brighter. Stronger demand for aniline for use in the textile industry and the generally better tone of industrial activity prompted producers to raise quotas on output somewhat. Production had been cut back sharply. Prices were steady and long unchanged.

Cyclohexylamine—Sales were reported last week at 47c. per pound in tanklots, the quotation that has prevailed since a 2c. per pound advance was effected last spring. Quotations per pound were 49c. in carlots and 50c. in less carlots. All prices were on a works basis.

Dicylcohexylamine — Quotations on tanklots were 52c. per pound last week, unchanged from the listing established last spring, when a 2½c. per pound advance was effected on bulk orders. Carlots were priced at 54c. per pound, less carlots at 55c. per pound. All prices were on a works basis.

Phthalic Anhydride—Business has been appreciably better since January 1. The improvement was not spectacular, but producers expected it to become more pronounced over a period of several weeks. They believed that consumers had trimmed inventories severely for year-end tax reports and that a backlog of demand would appear in the market. Supply was generally adequate. Prices were steady and unchanged.

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Urethane Expected to Be In Two Million Automobiles

More than two million automobiles to be produced this year will have urethane foam in safety padding and other interior appointments, it has been predicted by J. D. Mahoney, general sales manager of Mobay Chemical Company, St. Louis, Mo.

Consumers and homemakers in the auto capitol got their first good look at these and other applications for urethane products at Mobay's exhibit at the forty-fourth annual Detroit Auto Show which opened January 19 and will run through January 27.

Show visitors currently have an opportunity to examine, first-hand, furniture cushioned with urethane foam, carpets with urethane foam underlay, and lightweight outerwear jackets and coats lined with the new material.

Mobay is jointly owned by Monsanto Chemical Company and Farbenfabriken-Bayer, A. G., of Germany. The latter firm developed the original process for manufacturing urthane foams commercially from isocyanate chemicals.

US Borax & Chemical Names Gen'l Traffic Mgr.

P. J. O'Brien, vice-president and general manager of United States Borax & Chemical Corporation, New York, has announced the appointment of W. E. Maley as general traffic manager.

This appointment is the result of the recent merger of United States Potash Company and Pacific Coast Borax Company, to form United States Borax & Chemical Corporation, and the subsequent integration of the traffic departments with centralized traffic control at the corporate headquarters in Los Angeles.

Mr. Maley was general traffc manager of Pacific Coast Borax Company, having started with the company in 1938.

Other appointments include Philip Janicola as traffic manager, United States Potash Company Division, with headquarters in New York, and J. D. Cunliffe as traffic manager, Pacific Coast Borax Company Division, with headquarters in Los Angeles.

Interlake Iron, Globe Merger Goes Into Effect

R. W. Thompson, president of Interlake Iron Corporation, Cleveland, Ohio, has announced that the merger of Globe Metallurgical Corporation with Interlake has become effective.

The merger had previously been approved by directors of both companies. It follows the acquisition by Interlake of more than 99 percent of Globe Metallurgical stock, through exchange offers.

Globe Metallurgical, located near Beverly, Ohio, produces ferro-alloys used primarily in the manufacture of stainless and alloy steels. Its name has been changed to the Beverly plant of Interlake.

McGuire & Co. Renamed; Top Officials Are Chosen

McGuire & Co., Oakland, Calif., has announced its incorporation as McGuire Chemical Company.

New officers of the firm include James C. Bradley, secretary-treasurer; Gordon N. Meacham, vice-president in charge of sales; and Earl E. McCluer, vice-president in charge of production. Fred C. Watchers is traffic manager.

OZALID SALES MANAGER: James A. Travis, elevated from manager of branch operations to general sales manager of the Ozalid Division of General Aniline & Film Corporation, New York.

Synthetic Rubber Use Showed Drop in November

Synthetic rubber consumption during November amounted to 71,958 long tons as compared with 82,003 long tons in October, according to the Department of Agriculture. Production during the month amounted to 83,514 tons and stocks at the end of November totaled 199,464 tons.

November production, consumption and end-of-the month stocks of the various types of synthetic rubber follows:

S-type, 65,845 tons produced, 58,985 tons consumed, and 151,354 tons on hand; butyl, 6,011 tons produced, 4,128 tons consumed, and 26,971 tons on hand; neoprene, 8,614 tons produced, 6,756 tons consumed and 13,472 tons on hand; N-type, 3,044 tons produced, 2,089 tons consumed, and 7,667 tons on hand.

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Textile, Leather Chemicals

Trading in textile and leather chemicals was more active last week as sales gradually improved since the first of the month. Market tone remained steady and quotations were maintained at prevailing levels for the entire list. Consumers also stepped up demand for delivery against current contracts. Bichromates moved in good volume against contracts, with improved demand noted for spot delivery. Other chemicals were quotably unchanged and steady. In sizing materials, the firmness of potato starch featured this market. Production was continued at capacity and readily taken against former contracts. Some users recently booked contracts for needs during 1957. Grinders continued to confine offers to prompt delivery, and were not anxious to accept business for future shipment. Increased offers of medium grades of Siamese tapioca flour in tonnage lots were available at concessions for nearby arrival and afloat. This affected interest in replacements of this grade. Trading in Brazilian flour continued inactive and market remained merely nominal. Corn dextrin, starch and tanners sugar were raised sligthly due to increased freight rates.

Price Trends

Advanced

Corn, dextrin, 5c. per 100 lbs.
Starch, 5c. per 100 lbs.
Sugar, tanners, 6c. per 100 lbs.
Divi divi, $2 per ton.

Reduced

None.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	Jan. 20, 1956
108.95	108.53	108.55	105.46

For Current Prices see Page 9

Rayon and acetate producers shipped approximately 1,130,000,000 pounds of yarn and staple fiber last year, according to the Textile Economics Bureau, Inc. This figure, based on shipments for the first eleven months of 1956, compares with 1,261,900,000 pounds shipped in 1955, reflects a loss of 10½ percent. However, 1956 shipments are only 1½ percent under the 1952-1954 yearly average of 1,145,700,000 pounds.

Combining imports with United States deliveries, it was estimated that consumption last year approximated 1,200,000,000 pounds, 15½ percent less than the record total of 1,419,100,000 pounds in 1955, but slightly above the 1954 consumption of 1,154,700,000 pounds.

Consumption of raw silk in 1956 was the highest in recent years, running about 8 percent above 1955, according to the American Silk Council. Deliveries to mills totaled 59,295 bales compared with 54,893 in 1955. Imports also rose slightly, reaching 59,510 bales compared with 58,338 in 1955. Year-end stocks increased to 8,866 bales. Stocks at the end of November were 7,850 bales and at the end of December, 1955, were 8,651 bales.

Chemicals

Bichromates—Consumers absorbed good sized quantities against current contracts. Demand for spot stocks also was quite active. All grades were maintained at former levels.

Sodium Acetate—Consumer interest has improved for prompt needs since the first of the year. Prices were without change and steady.

Sodium Hydrosulfite—Market was unchanged and steady. Demand was reported moderate chiefly for immediate requirements.

Sulfonated Oils—Demand was spotty and confined to actual needs. Quotations were without change.

Sizing Materials

Albumin Blood—This market was without change and steady. Demand continued for prompt delivery. Prices ranged from 65c. to $1 per pound, according to quantity.

Corn Dextrin—Improved volume of business was noted for nearby delivery. Prices were firm and slightly higher due to increased freight rates. Gum was quoted at $9.33 per 100 pounds, paper bags, carlots, New York delivery; light canary, $9.07; dark canary, $9.17 and white, $8.91, same basis. Smaller lots were 15c. higher.

Corn Starch—Business was quite active for immediate delivery. Prices were advanced 5c. 100 pounds, reflecting higher freight rates. Pearl was higher at $7.32 per 100 pounds, paper bags, carlots, New York basis and powder, $7.44, same basis. Less carlots were 15c. higher. Visible corn supply was lower and declined 515,000 bushels to 69,409,000 pounds for the week ended January 11, compared with 49,526,000 bushels for the same time last year, according to the Chicago Board of Trade.

Corn Sugar—Tanners was raised 6c. per 100 pounds as a result of higher freight rates. Carlots were quoted at $7.32 per 100 pounds, paper bags, New York basis and less carlots $7.67 per 100 pounds.

Egg Albumin—Trading was spotty and confined to actual needs. Prices were unchanged but unsettled due to keen competition. Flake was offered at $1.59 to $1.61 per pound, and powder, $1.63 to $1.65, spot according to quantity. Technical remained in light supply and well held at $1.08 to $1.10 per pound, same basis.

Egg Yolk—This market was steadier than albumin. Prices were maintained at $1.05 to $1.07 per pound, spot as to quantity. Demand was moderate chiefly for immediate delivery.

Potato Starch—This market continued in a firm position. Production was reported at capacity and moved steadily against former contracts. Offers from mills were confined to prompt delivery. Carlots were maintained at 6¼c. per pound, f.o.b. mills, Maine. Idaho markets was also steady at the same price, with shipments to eastern points quoted at ½c. less. Good demand was noted for stocks on spot, with sales ranging from 8¼c. to 9¼c. per pound, exwarehouse, according to quantity.

Tapioca Flour—Offers of medium grades of Siamese flour in tonnage lots were available on dock and afloat at concessions which unsettled the market. This also reduced interest in shipments from primary sources. Grade A, however, was unchanged and replacements were maintained at 6c. per pound, exdock, January shipment. Trading in Brazilian flour replacements was reported at a standstill and quotations were merely nominal at about 10c. per pound, exdock.

Tanning Materials

Chestnut Extract—While market was quiet, replacements were well held at former levels. Solid extract guaranteed 60 percent was quoted at 9⅛c. per pound, carlots, exdock, plus duty, prompt shipment and powdered, 70 percent, 10⅝c., same basis.

Cutch—Interest in replacements was quite active. Offers for shipment were reported light and well held at 8½c. per pound, exdock, plus duty.

Divi Divi—Sales of new crop 45 percent tannin were reported at $80 per ton, carlots, exdock. Market was strong as supplies for shipment were limited.

Mangrove Bark—Trading was restricted to an occasional lot for nearby shipment. Offers were quotably unchanged. African bark was quoted at $66 per ton, exdock, prompt shipment; Colombian, $58 per ton, and Ecuadorian, $55, same basis.

Quebracho Extract—There was little doing in this market. Interest in replacements was restricted to nearby. Quotations remained steady. Solid ordinary guaranteed 63 percent tannin was quoted at 11 21/32c. per pound, exdock, plus duty and clarified 64 percent 12 63/64c., same basis.

Valonia—Replacements were quotably unchanged. Offers were light, with buying interest also reported slow. Beards were quoted at $86 per ton, carlots, exdock; cups, $64 per ton, same basis, and extract, 9¾c. per pound, exdock, plus duty.

Wattle—Consumer interest in replacements was fairly active for prompt shipment. Prices were unchanged and well held for all grades. Fair average bark quoted at $95 to $96 per ton, exdock, prompt shipment and merchantable at $91 to $92. East African extract was unchanged at 9¾c., and South African 10c. per pound, carlots, exdock, plus duty.

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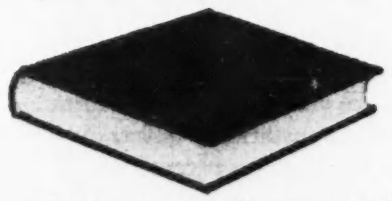

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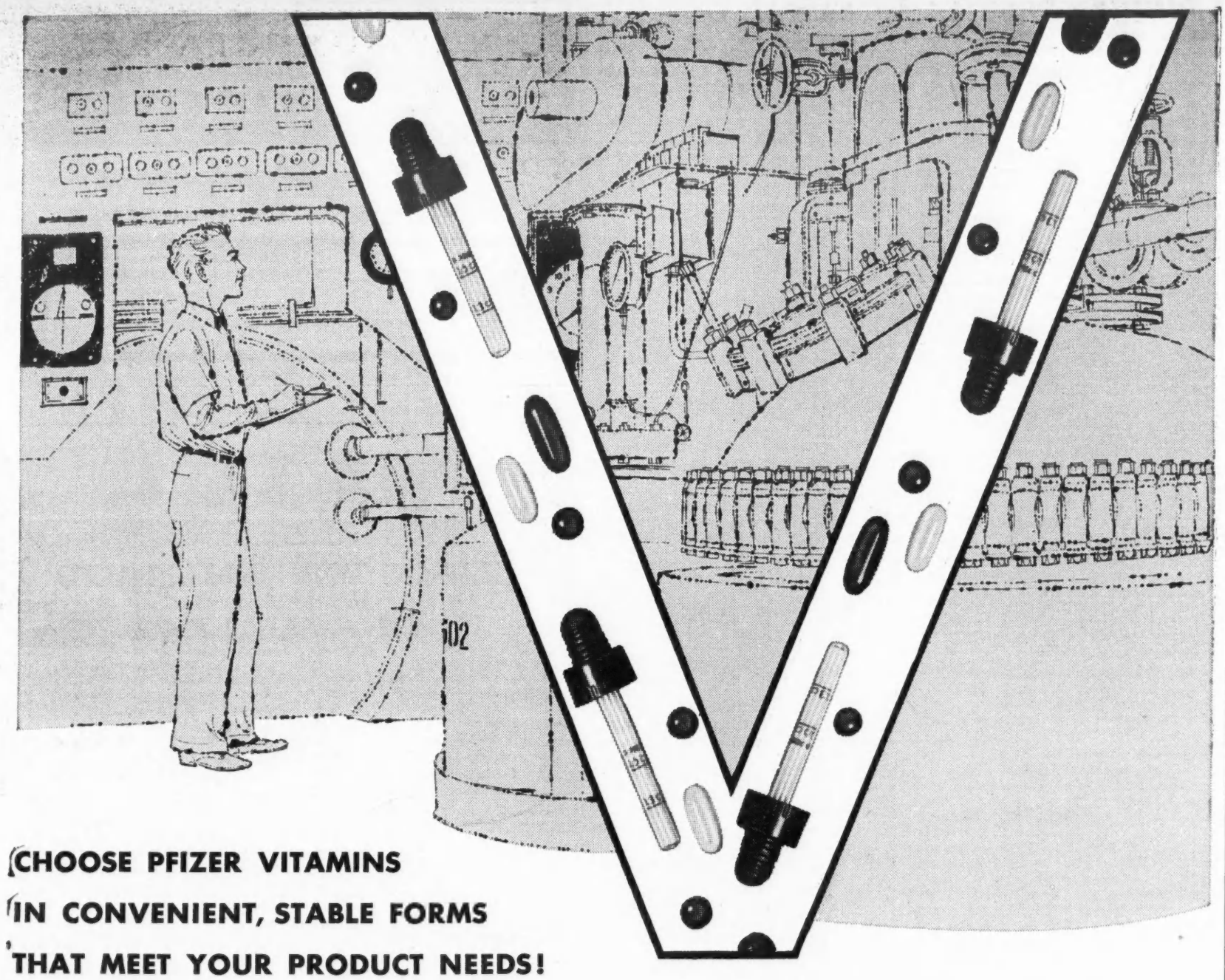

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Drugs, Fine Chemicals

A major producer announced that effective today prices on streptomycin and dihydrostreptomycin sulfate will be advanced 1c. per gram. The same producer also noted that prices on procaine and potassium penicillin will be increased 1½c. per million units. Advances were said to be the result of light supplies and the generally strong tone in the market for antibiotics, which has been noted since last fall. The last increase effecting these same antibiotic products was in late November of 1956.

Trade sources continued to report considerable competition from foreign sources for trade in aminophylline and theophylline markets. A similar situation exists in the caffeine market it was said.

Ascorbic acid producers recorded strong demands during the opening weeks of January. Imports of Vitamin C were said to be less a factor this year than last. Riboflavin was widely used in vitamin preparations as well as in feed supplements. Pyridoxine demands were moderate to good.

Trading in menthol was quiet as dealers surmised that consumers were waiting for a new crop from Brazil. Improvement in the quality of Brazilian menthol crystals in recent years was said to have made that commodity attractive to consumers.

Current reports indicate that the agave plant, which grows wild in southwest Texas, is a possible new domestic source material for hydrocortisone. The agave is said to yield 1 percent smilagenin as against the 3 percent obtained from currently used Mexican yams.

Trade in iodides and mercurials as used in pharmaceutical preparations was virtually unchanged as it has been for many months. It was pointed out that several mercurial salts are now marketed under NF specifications instead of USP. Prices were unchanged and supplies quite plentiful.

Isoniazid in conjunction with antibiotics continued to find good use in the treatment of tuberculosis, it was said.

Price Trends

Advanced
None.

Reduced
None.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Jan. 20, 1956
65.25	65.25	65.26	66.41

For Current Prices See Page 9

Acid Ascorbic—Producers met with heavy seasonal demands from makers of frozen fruit juices and canned foods. Supplies were holding up well and dealers experienced no difficulties in filling orders promptly. Price positions taken early last year were firmly held and manufacturers said the situation showed no signs of weakening.

Acid Diallylbarbituric—NF material was available in 5 pound tins priced at $6.75 per pound while 25 pound drum quantities sold for $6.25 and a 100 pound drum was listed at $6 per pound. Supplies were adequate and demands said to be routine.

Aminophylline — USP material was offered in 100 pound lots priced at $3.55 per pound. Supplies were adequate and demands steady. Domestic producers noted considerable competition from imported products.

Antibiotics — A major producer announced that effective today streptomycin and dihydrostreptomycin sulfate will be advanced 1c. per gram to bring the base price of both to 8½c. per gram. The same producer noted that potassium and procaine penicillin will be increased 1½c. per million units to bring the base price of non-sterile grades to 6¾c., while the base price of sterile material will be 7c. per million units. Proportionate increases will be applied to all finished dosage forms and feed supplements.

Benzocaine—Demands were said to be moderate and supplies quite plentiful. Dealers noted that benzocaine has ranged in price between $3.48 and $3.50 since 1950.

Butyl Laurate — Producers reported stocks on hand quite in order. Demands were steady and material was offered in drum quantities at 37½c. per pound. Prices were unchanged and it was said that current market conditions do not warrant a change.

Butyl Oleate—Refined material was offered at 32c. per pound, F.O.B. works. The market was quiet. Demands were steady with sales at a moderate level. Trade sources indicated that no price adjustment was probable in this market during the first quarter.

Butyl Stearate—Consumer interest was routine and prices were unchanged from those which were established in the trade some time ago. Butyl stearate was listed at 26c. per pound. Trade sources reported that current market conditions do not indicate any adjustment either way for this commodity. Supplies were plentiful.

Chloral Hydrate—Demands were routine and stocks on hand were plentiful. USP crystals in 1,000 pound lots was priced at 83c. per pound while 500 pound lots were available to the trade at 88c. and 100 pound lots at 93c. Sales were said to be steady at a low volume.

Hydrocortisone—Acetate and alcohol prices were firmly quoted and unchanged. Supplies were adequate and demands moderate. Current reports indicate a possible new source of cortisone starting material in the agave plant which gows wild in southwest Texas. Yields of smilagenin from agave are estimated at 1 percent as compared with the 3 percent yields of presently used Mexican yams. However, simple agave-smilagenin extraction and the fact that Mexican yams are heavily taxed make the agave a promising domestic cortisone source, it was said.

Ichthammol—NF material was available in 100 pound drum quantities priced at 75c. per pound. Drums of 50 pounds were 20c. higher per pound while 25 pound drums were listed at $1.05. Supplies were quite in order and sales were said to be steady at a low volume.

INAH—Isoniazid continued in good use for tuberculosis treatment in combination with antibiotics. Supplies were said to be good and demands steady at a moderate level. Prices were unchanged from those which have been established for the past three years.

Iodides—Prices which have been in effect for over a year on most iodides were unchanged. Demands were moderate and supplies quite adequate to handle the modest needs which characterize the trade at this time. Dealers anticipated no changes in the conditions in this market for some time to come.

Kaolin—Demands were sluggish and the market was said to be quiet. Stocks on hand were quite plentiful and dealers reported no delays in filling spot orders. Prices were unchanged.

Menthol—Dealers noted that consumer interest was somewhat subdued after the flurry of buying during the latter months of 1956. Supplies were said to be adequate and prices unchanged. USP Brazilian menthol was priced at $6.50 per pound. Trade sources pointed out that the quality of menthol crystals from Brazil have been much improved in recent years.

Mercurials—Prices remained unchanged on calomel, white, red and yellow precipitates and corrosive sublimate. Supplies were adequate to handle current needs and demands were said to be steady. It was noted that NF specifications have been applied to calomel and yellow precipitate. Current prices have been in effect for over two years.

Methionine—Demands were routine and supplies quite adequate to handle the current needs of the trade. Pharmaceutical dlmethionine, 50 pounds or more, was available priced at $3.50 per pound while a feed grade, same quantity, was listed at $2.65.

Oxyquinolin Sulfate—Material in 100 pound lots was offered priced at $4.75 per

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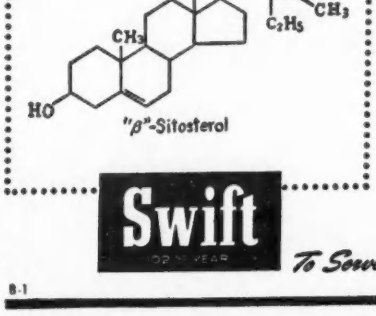

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Drugs, Fine Chemicals

pound. Supplies were adequate to handle the current needs of the trade. Demands were said to be routine. Prices are unchanged from previous reports.

Piperazine—Demands were said to be heavy and supplies adequate. A producer reported stocks well sold up and facilities taxed to keep pace with consumer needs. Carload price was reported to be $3 per pound, f.o.b. works, while 18 drum to truckload price was 5c. higher. The use of piperazine salts has shown a good increase in recent years it was said.

Pyridoxine — Supplies were quite adequate to handle the needs of the trade. Demands were said to be good and prices unchanged from those levels which have prevailed in the trade for some time. Producers indicated that no price changes were to be anticipated in the near future.

Riboflavin—All grades were said to be continuing in wide use in vitamin preparations of all kinds. Supplies were quite adequate and demands continued at the high seasonal levels which have been reported since the fall of last year. B_2 for use in feed supplements was said to have shown a good increase in recent months.

Sodium Benzoate—Demands were said to be good for both USP and technical material. It was said that technical material was receiving increased attention in this country for use as a corrosion inhibitor in water based paint systems. Experimental work has shown that tinplate corrosion can be prevented by addition of sodium benzoate during paint formulation. A concentration of one-half to 2 percent has been shown to be effective. It was suggested that sodium benzoate could provide a more economical solution to the tinplate corrosion problem than has been possible heretofore.

Sodium Diphenylhydantoin—USP material was offered by producers in 25 pound drums priced at $5 per pound while a 10 pound drum was priced at $5.30 and 5 pound bottles were $5.60. Demands were routine and supplies quite adequate to handle the modest needs of the trade.

Sodium Salicylate—Prices were unchanged and supplies were said to be quite adequate to handle the current modest requirements of the trade. Demands were good and sales at a moderate volume. Crystalline USP material was available from major producers priced at 74c. per pound. Principal end use continued to be in the treatment of certain rheumatic conditions.

Sulfas—Demands were said to be very good. Supplies were reported quite adequate to care for present trade needs. Prices were unchanged from levels previously reported. Sulfapyridine, USP powder, in 1000 pound lots was available priced at $7 per pound while NF sulfathiazole, same quantity, was priced at $2.50 per pound.

Theophylline—Competition was stiff between domestic and imported materials. USP domestic theophylline was available in 100 pound lots priced at $3.65 per pound. Stocks on hand were plentiful and demands steady.

Thiamin—Demands were good for this important B-complex member for use in geriatric preparations. It was said that although researchers have shown that the use of vitamins in amounts above those normally required have not lengthened the span of active life, it is agreed that needless accompanying defects of aging may result below normal vitamin con-

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sumption. Current reports indicate that all of the great systems of the body may be affected by vitamin deficiences and that the many conditions which speed decline may be postponed or countered by judicious use of such materials as are presently available. It was pointed out that present day research is aimed toward the discovery and treatment of degenerative changes in the human body and that vitamin therapy is a valuable adjunct in this direction.

Zinc Undecylenate—Consumer interest in this item which finds good use in preparations used to combat athlete's foot, was reported routine. Supplies were quite plentiful and prices were quoted at $2 per pound.

Botanicals

Trading on the spot market was said to be quiet last week. Dealers continued to report that consumer interest in crude drug products is normal for this time of year. Supplies of domestic items were said to be in good order, generally. It was felt that items which are imported from trouble spots in the world would continue to be scarce and high priced. Lycopodium continued to be priced at the high levels attained in the last few weeks since a tight supply situation has developed. Consumer demands for the latter item were moderate it was said.

Consumer interest in water soluble gum products such as tragacanth, karaya, locust bean and arabic were again characterized as moderate. Supplies were light due to the closing of the Canal and the troubled Middle East situation.

Arabic Gum—The market was quiet. Supplies were adequate to cover present needs although trade sources indicated that should unusual demands be made, shortages could develop quickly. Dealers again cited the closing of the Canal as a reason for the unsettled conditions in this market. Prices were unchanged from previous reports.

Digitalis—Demands were said to be seasonally good and supplies adequate to handle the needs of the trade. Prices were unchanged from those levels which have been previously reported.

Locust Bean Gum—Trading was subdued. Dealers reported continued light supplies and prices unchanged at 50c. per pound. It was felt that stocks were adequate although increased demands could change this situation rapidly.

Lycopodium—Supplies continued very light. Prices ranged from $3 to $3.50 per pound. Demands for this material were moderate. Dealers anticipated that present market conditions would be the same for several weeks to come.

Karaya Gum—Supplies were adequate and demands normal for this time of year it was said. Prices were unchanged from those levels previously reported. NF No. 1 powder, in barrel quantities, was priced at 50c. per pound. Dealers anticipated no changes in the conditions in this market for some time to come.

Tragacanth Gum—Prices were unchanged and high, ranging from $4.50 to $4.70 per pound for No. 1 ribbons. Supplies were light and demands steady with sales at a moderate level. As in other gum markets, it was felt that acute supply problems could develop as a result of the troubled Middle East political situation.

Analytical Chemists' Meeting Set for Pittsburgh in March

A speech entitled "The Illuminated Chemist," by Dr. George Russell Harrison, of Massachusetts Institute of Technology, will feature the eighth Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy, to be held in Pittsburgh, Pa., March 4 through 8.

The technical program will include papers in the field of analytical chemistry, spectroscopy, spectrophotometry, electroanalysis, microscopy, mass spectrometry, radio-frequency, x-ray fluorescence, and absorption analysis.

An instrument exposition will be held in conjunction with the meeting. The show will feature the most recent developments in laboratory equipment.

Pfizer & Co. Awarded Steroid Process Patent

A United States patent for a process to produce prednisone and prednisolone has been granted to Chas. Pfizer & Co., Brooklyn, N. Y. The inventor is Dr. Gilbert M. Shull of Pfizer's biochemical research laboratories.

Issued January 8, the new patent (U.S. No. 2,776,927) describes a method of producing prednisone or prednisolone by fermentation through the action of a protaminobacter organism.

These two steroids have been found to be among the most effective agents in the treatment of arthritis and other inflammatory diseases, according to Pfizer.

APMA Elects Four

Four new members have been elected to the American Pharmaceutical Manufacturers' Association. They are: Barnes-Hind Laboratories, Sunnydale, Calif; Schumann-Jones Company, Cleveland, Ohio; the surgical products division of American Cyanamid Company, New York, and Warren-Teed Products Company, Columbus, Ohio.

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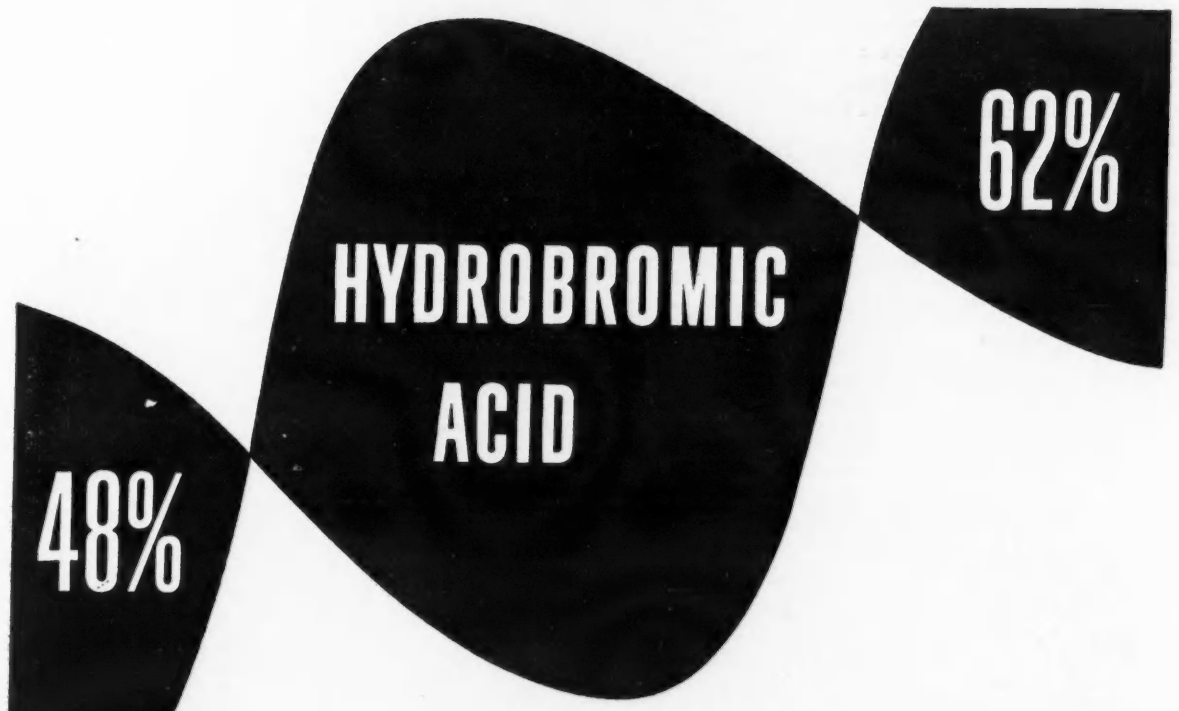

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60 dms, Barcelona
ALOE—50 cs, Wessel Duval & Co, Oranjestad
6 cs, London
ALTHEA LEAVES—6 bbls, S B Penick & Co, Rijeka
AMYRIS OIL—15 dms, Olfactors Inc, Miragoane
3 dms, Ungerer & Co, Port Au Prince
ANILINE DYES—3 dms, Hensel Bruckmann & Lorbacher, Bremen
36 dms, C A Haynes, Hamburg
5 dms, Carbic Color & Chemical Co, Hamburg
25 dms, Hensel Bruckmann & Lorbacher, Hamburg
49 dms, Geigy Chemical Corp, Rotterdam
25 dms, Geigy Chemical Corp, Hamburg
4 dms, Geigy Chemical Corp, Bremerhaven
9 dms, Ciba Co, Havre
37 dms, Havre
ANISE SEED—200 bgs, M J Golombeck, Alicante
ANNATTO SEED— 5 bgs, D Steengrafe & Co, Kingston
ANTIMONY REGULUS—941 cs, Sibenik
ARROW ROOT—4,000 bgs, Morningstar Nicol, Kingstown
ARSENIC, WHITE—38 bbls, American Smelting & Refining Co, Tampico
BALSAM TOLU—50 cs, Barranquilla
BARBASCO ROOT—280 bgs, Astoria Panamericana, Callao
BARIUM SULFATE—100 dms, Picker X-Ray Corp, London
BAY OIL—2 dms, Agriscent Corp, Dominica
1 dm, Felton Chemical Co, Dominica
1 dm, Dodge & Olcott, Dominica
BEEF EXTRACT—465 cs, International Packers Ltd, Buenos Aires
BEESWAX—56 bgs, H H Pike & Co, Puerto Plata
50 bgs, Porcella Vicini & Co, Ciudad Trujillo
30 bgs, John Holt & Co, Port Au Prince
101 pkgs, J H Schroder, Assab
30 bgs, Schutte & Focke, Ciudad Trujillo
54 bgs, E Vadillo Ruiz, Santiago
34 bgs, H H Pike & Co, Santiago
200 bgs, Biddle Sawyer Corp, Valparaiso
92 bgs, Mercantile Metal & Ore Corp, San Antonio
68 bgs, Smith & Nichols, Porto Alegre
13 bgs, Port Au Prince
301 blks, Assab
60 bgs, Tampico
25 bgs, Ciudad Trujillo
142 bgs, Santiago
BERBERIS ROOT—96 bgs, Irving Trust Co, Callao
BISMUTH—103 cs, Cerro de Pasco Corp, Callao
BOIS DE ROSE OIL—13 dms, Gillespie & Co, Paramaribo
BUTTONLAC—100 bgs, Calcutta
CADMIUM—200 cs, Silvey Shipping Co, Yokohama
CALCIUM GLYCEROPHOSPHATE—10 dms, Roussel Corp, Marseille
PHOSPHATE, DIBASIC—2,204 bgs, Wessel Duval & Co, Antwerp
TUNGSTATE—15 dms, Silvey Shipping Co, Rotterdam
CARAWAY SEED—200 bgs, Biddle Purchasing Co, Rotterdam
200 bgs, C M Van Sillevoldt, Rotterdam
300 bgs, Louis Furth, Rotterdam
200 bgs, R J Spitz, Rotterdam
CARNAUBA WAX—249 bgs, River Plate Corp, Natal
68 bgs, Wm Diehl & Co, Natal
34 bgs, Cornelius Wax Refining, Natal
112 bgs, Frank B Ross, Natal
200 bgs, Balfour Guthrie, Tutoia
365 bgs, Biddle Sawyer Corp, Tutoia
313 bgs, Strahl & Pitsch, Tutoia
450 bgs, Bankers Trust Co, Areia Branca
111 bgs, Frank B Ross, Areia Branca
56 bgs, Wm Diehl & Co, Areia Branca
556 bgs, S C Johnson & Son, Areia Branca
155 bgs, Wm Diehl & Co, Fortaleza
449 bgs, National City Bank, Fortaleza
212 bgs, Cornelius Wax Refining, Fortaleza
112 bgs J H Schroder Fortaleza
CASEIN—287 bgs F H Paul & Stein Bros, Oslo
CASHEWNUT SHELL LIQUID—203 tons, Fidelity Union Trust Co, Cochin
CASSIA—842 bls, Rotterdam
CASTOR BEANS—1,667 bgs, Spencer Kellogg & Sons, Bahia
702 bgs, Spencer Kellogg & Sons, Salvador
1,415 bgs, Spencer Kellogg & Sons, Jacmel
OIL—217 tons, Spencer Kellogg & Sons, Lobito
300 tons, Woodward & Dickerson, Salvador
323 tons, Bunge Corp, Bombay
315 tons, Santos
CELERY SEED—60 bgs, C M Van Sillevoldt, Marseille
62 bgs, Otto Gerdau, Marseille
20 bgs, Wm M Allison & Co, Marseille
CHESTNUT EXTRACT—1,400 bgs, Barkey Importing Co, Genoa
CITRONELLA OIL—15 dms, Norda Essential Oil & Chemical Co, Keelung
6 dms, Volkart Bros, Colombo
COALTAR DYES—2 dms, Hensel Bruckmann & Lorbacher, Hamburg
36 dms, C A Haynes, Havre
26 dms, Hensel Bruckmann & Lorbacher, Rotterdam
15 dms, Orlex Dyes & Chemical Corp, Rotterdam
22 dms, Toms River Cincinnati Chemical Corp, Rotterdam
36 dms, Geigy Chemical Corp, Rotterdam
COCONUT OIL—450 tons, E F Drew & Co, Cebu
830 tons, American Trust Co, Cebu
360 tons, Manila
CODLIVER OIL—286 dms, Scandinavian Oil Co, Reykjavik
20 dms, Arista Oil Products Co, Reykjavik
CREAM OF TARTAR—200 bgs, Leghorn
CRESYLIC ACID—244 dms, Melanol Corp, Hamburg
29 tons, H A Gogarty, London
CUTTLEFISH BONE—50 cs, Manufacturers Trust Co, Kobe
100 cs, Guaranty Trust Co, Kobe
100 cs, Kobe
DEXTRIN—250 bgs, Chase Manhattan Bank, Rotterdam
DINA ACID—16 cbys, Hensel Bruckmann & Lorbacher, Bremen
DOGWOOD BARK—93 bgs, Meer Corp, Kingston
15 bls, Meer Corp, Kingston
ELDER BARK—18 bls, Meer Corp, Rijeka
EUCALYPTUS OIL—20 dms, Commercial Banking Co of Sydney, Melbourne
FENNEL SEED—250 bgs, Louis Furth, Bombay
90 bgs, Levy & Levis Co, Bombay
91 bgs, S B Penick & Co, Rijeka
FENUGREEK SEED—112 bgs, Wm E Martin & Sons, Karachi
FISHLIVER OIL—12 dms, J D Smith Interocean, Yokohama
5 dms, Interocean Chemical & Minerals Corp, Yokohama
2 dms, Arista Oil Products Co, Yokohama
FUEL OIL—229,081 bbls, Paragon Oil Co, Punta Cardon
10,000 bbls, Asiatic Petroleum Corp, Curacao
104,715 bbls, E H Sprague & Son, Punta Cardon
91,114 bbls, Central Petroleum Corp, San Lorenzo
337,841 bbls, Esso Standard Oil Co, Aruba
168,000 bbls, Esso Export Corp, Aruba
112,305 bbls, Royal Petroleum Corp, Punta Cardon
181,600 bbls, Esso Export Corp, Las Piedras
113,087 bbls, Paragon Oil Co, San Lorenzo
GALL—3 dms, F J Benkart, Vera Cruz
NUTS—90 bgs, Zinsser & Co, Lattakia
108 bgs, Mallinckrodt Chemical Works, Lattakia
190 bgs, I R Boody & Co, Lattakia
260 bgs, I R Boody & Co, Beirut
GELATIN—10 bbls, Riches Nelson, Antwerp
250 bgs, Hensel Bruckmann & Lorbacher, Rotterdam
50 bgs, T M Duche & Sons, Rotterdam
337 bgs, Transatlantic Animal By Products Corp, Rotterdam
50 dms, B Young & Co, London
500 bgs, M Corbett, Marseille
GENTIAN ROOT—100 bgs, Meer Corp, Rijeka
GHATTI GUM—57 bgs, P A Dunkel, Bombay
GLUE—20 bgs, Jung Forwarding Co, London
GLYCERINE—82 dms, R P Casado, Havana
230 dms, Colgate Palmolive Co, Kingston
97 tons, Buenos Aires
32 dms, San Jose
GRAPHITE—750 bgs, C Pettinos, Hong Kong
1,000 bgs, Asbury Graphite Mills, Colombo
3,261 bgs, Asbury Graphite Mills, Hommelvik
GUANIDINE CARBONATE—45 dms, Terra Chemicals Inc, Bremen
GUAR GUM—6,794 bgs, Stein Hall & Co, Bombay
2,099 bgs, Calcutta
GYPSUM—15,884 tons, National Gypsum Co, Halifax
HELLEBORE ROOT—134 bls, Meer Corp, Rijeka
INDIGO—192 dms, C A Haynes, Hamburg
40 cks, C A Haynes, Hamburg
IODINE, CRUDE—395 kgs, Chilean Nitrate Sales Corp, Tocopilla
176 kgs, Antony Gibbs & Co, Tocopilla
IPECAC ROOT—11 bls, Simab Corp, Santos
J ACID—60 dms, Atlantic Chemcial Corp, Genoa
JUNIPER BERRIES—91 bgs, S B Penick & Co, Rijeka
273 bgs, Meer Corp, Rijeka
KARAYA GUM—34 bgs, Max Van Pels, Bombay
190 bgs, P A Dunkel, Bombay
73 bgs, Manufacturers Trust Co, Bombay
67 bgs, Meer Corp, Bombay
300 bgs, Wernet Dental Manufacturing Co, Bombay
307 bgs, Jacques Wolf & Co, Bombay
128 bgs, Stein Hall & Co, Bombay
240 bgs, Morningstar Nicol, Bombay
67 bgs, Colony Import & Export Corp, Bombay
KOLA NUTS—192 bgs, John Holt & Co, Accra
127 bgs, J A Manton, Kingston
LAURIC ACID—540 bgs, Procter & Gamble Co, Copenhagen
LAVENDER OIL—2 dms, Split
LEMON OIL—1 dm, Dodge & Olcott, Vera Cruz
2 dms, W F Mahneke, Vera Cruz
6 dms, Lo Curto & Funk, Vera Cruz
LEMONGRASS OIL—6 dms, Cochin
LIGNIN PITCH POWDER—1,600 bgs, Barrentan Testing & Research Corp, Oslo
LIME OIL—1 dm, Citrus & Allied Essential Oil Co, Santiago
3 cs, W J Bush & Co, Dominica
LITHARGE—527 dms, Eagle Picher Co, Tampico
LIVERMEAL—1,200 bgs, National City Bank, Buenos Aires
LOCUST BEAN GUM—1,448 bgs, Morningstar Nicol, Genoa
600 bgs, J L Quesada, Barcelona
KERNELS—653 bgs, Hanover Bank, Casablanca
LOGWOOD EXTRACT—108 cks, American Dyewood Co, Kingston
LYCOPODIUM—2 cs, Meer Corp, Hamburg
14 kgs, Meer Corp, London
MACE—20 cs, Rotterdam
MANGANESE ORE—224 bgs, National Carbon Co, London
MARINE OIL COMPOUND—600 bgs, Chemical Bank, Oslo
MARJORAM LEAVES—20 bgs, Louis Furth, Marseille
61 bls, Louis Furth, Marseille
MENUKELIVER OIL—5 dms, Consumers Import Co, Yokohama
MERCURY—100 flks, Lo Curto & Funk, Tampico
500 flks, J H Schroder, Leghorn
200 flks, Rijeka
MOLASSES—550 tons, W R Grace & Co, Salaverry
MONTAN WAX—134 bgs, Frank B Ross, Hamburg
MUSTARD SEED—200 bgs, C Gulden, Copenhagen
MYRRH GUM—96 bgs, Meer Corp, Aden
24 bgs, Max Van Pels, Aden
32 bgs, Van Ameringen Haebler, Aden
16 bgs. S B Penick & Co, Aden
16 bgs, Aden
NAPHTHOL—15 dms, Hensel Bruckmann & Lorbacher, Hamburg
4 dms, Kaufman & Vinson, Hamburg
NUTMEG—34 bgs, R J Spitz, Rotterdam
31 bgs, J W Phyfe, Rotterdam
OENANTHOL—14 dms, Givaudan Corp, Marseille
OLIBANUM GUM—240 bgs, Meer Corp, Aden
OLIVE OIL—50 dms, J Ossola & Co, Genoa
135 dms, Ellyda Import Co, Haifa
ORANGE OIL—12 cs, Van Ameringen Haebler, Kingston
OURICURY WAX—56 bgs, Strahl & Pitsch, Bahia
56 bgs, Frank B Ross, Bahia
183 bgs, Bahia Ceras Products, Salvador
PALM OIL—195 tons, Balfour Guthrie, Matadi
PALMAROSA OIL—2 pots, George Lueders & Co, Bombay
PALMKERNEL OIL—600 tons, E F Drew & Co, Matadi
623 tons, Matadi
PAPAIN—28 cs, S B Penick & Co, Colombo
27 cs, Meer Corp, Colombo
54 cs, Mombasa
PAPRIKA—100 bgs, Archibald & Kendall, Valparaiso
50 bgs, Norwalk Mills, Valparaiso
250 bgs, M J Golombeck, Valparaiso
1,058 bgs, Brilliant Spanish Paprika Inc, Alicante
50 bgs, Wm E Martin & Sons, Rijeka
PATCHOULI OIL—8 cs, J Berlage, Penang
PEATMOSS—500 bls, New Amsterdam Import Co, Bremen
500 bls, E Dunwoody, Bremen
PEPPER, BLACK—240 bgs, Alleppey
240 bgs, Cochin
RED—500 bgs, W L Willner, Alicante
40 bgs, Louis Furth, Kingston
80 bgs, M J Golombeck, Kingston
80 bgs, A G Dunn, Kingston
240 bgs, Otto Gerdau, Kingston
400 bgs, A Beckman, Alicante
500 bgs, R T French, Alicante
250 bgs, Van Loan & Co, Alicante
20 bgs, H Schlicting, Alicante
100 bgs, P H Petry, Alicante
650 bgs, J Weinstein, Alicante
800 bgs, Wm E Martin & Sons, Alicante
350 bgs, Kerns & Smith Spice Co, Alicante
1,000 bgs, A A Sayia, Alicante
50 bgs, A G Dunn, Alicante
250 bgs, H Marmorek & Son, Alicante
48 bgs, Mombasa
PETITGRAIN OIL—16 dms, Hollander Trading Corp, Buenos Aires
PETROLEUM, CRUDE—420,601 bbls, Hess Inc, Maracaibo
127,029 bbls, Esso Standard Oil Co, La Salina
260,000 bbls, Esso Standard Oil Co, Puerto La Cruz
PIMENTOLEAF OIL—1 dm, J H Elton, Kingston
2 dms, Magnus Mabee & Reynard, Kingston
PINENEEDLE OIL—9 dms, Polarome International Corp, Hamburg
POLLACKLIVER OIL—100 dms, National City Bank, Yokohama
50 dms, Arista Oil Products Co, Yokohama
50 dms, J D Smith Interocean, Yokohama
POPPY SEED—100 bgs, R T French, Rotterdam
POTASSIUM PERMANGANATE—55 dms, Leslie Kleyman Corp, Hamburg
SILICATE—907 bgs, Sylvania Electric Products, Rotterdam
PSYLLIUM SEED HUSKS—619 bgs, Parke Davis & Co, Bombay
491 bgs, T M Duche & Sons, Bombay
PYRETHRUM EXTRACT—60 dms, McLaughlin Gormley King Co, Matadi
FLOWERS—125 bls, E R Squibb & Sons, Mombasa
QUEBRACHO EXTRACT—521 bgs, Barkey Importing Co, Buenos Aires
QUINCE SEED—117 bgs, Meer Corp, Alicante
RUTILE SAND—6,400 bgs, Lo Curto & Funk, Brisbane
600 bgs, International Titanium Corp, Brisbane
990 bgs, Ayrton Metal & Ore Corp, Brisbane
RUTIN—5 dms, Commercial Banking Co of Sydney, Melbourne
12 bgs, Karl B Rosen & Co, Sydney
SAGE LEAVES—16 bls, S B Penick & Co, Genoa
100 bls, National City Bank, Split
100 bls, Split
SANDALWOOD—100 bgs, George Lueders & Co, Bombay
OIL—7 cs, Agriscent Corp, Bombay
SANTAL ESSENCE—1 ck, Havre
SAPONINE—24 cs, A K P Co, Valparaiso
SAVORY LEAVES—100 bls, M J Golombeck, Marseille
100 bls, Wm E Martin & Sons, Ripeka
SEAWEED EXTRACT—20 cks, National City Bank, Copenhagen
SEEDLAC—200 bgs, Wm Zinsser & Co, Calcutta
200 bgs, Bradshaw Praeger & Co, Calcutta
400 bgs, Calcutta
SESAME SEED—137 bgs, Louis Furth, San Juan Del Sur
HULLED—200 bgs, Archibald & Kendall, San Juan Del Sur
100 bgs, Sokol & Co, San Juan Del Sur
370 bgs, Louis Furth, San Juan Del Sur
SHELLAC—50 bgs, Bradshaw Praeger & Co, Calcutta
100 bgs, Gillespie Rogers Pyatt, Calcutta
100 bgs, United Shellac Corp, Calcutta
50 bgs, Mac Lac Co, Calcutta
100 bgs, Mantrose Corp, Calcutta
86 bbls, F H Paul & Stein Bros, Rotterdam
41 bgs, F H Paul & Stein Bros, Rotterdam
100 bgs, Calcutta
SIENNA—300 bgs, Reichard Coulston, Leghorn
SOAP BARK—52 bgs, S B Penick & Co, Valparaiso
SODIUM ALGINATE—30 dms, Stein Hall & Co, Glasgow
4 cs, A & R Simon Co, Yokohama
CYANIDE—1,650 dms, Philip Bros Chemicals, Rotterdam
SPERM OIL—195 tons, Pisco
STARCH—95 bgs, Morningstar Nicol, Rotterdam
STRAMONIUM LEAVES—42 bls, S B Penick & Co, Rijeka
STRAWBERRY LEAVES—11 bls, S B Penick & Co, Rijeka
SULFUR, CRUDE—10,004 tons, American Cyanamid Co, Coatzacoalcos
SWORDFISHLIVER OIL—3 dms, Arista Oil Products Co, Yokohama
TALC—218 bgs, C B Chrystal Co, Bombay
TARA POWDER—1,501 bgs, Chase Manhattan Bank, Salaverry
63 bgs, Foreign Domestic Distributors, Salaverry
626 bgs, Salaverry
TARTARIC ACID—120 cks, Frank Samuel & Co, Marseille
THALLIUM SULFATE—3 cs, Gallard Schlesinger, Marseille
THIAMINE HYDROCHLORIDE—20 dms, Takamine Overseas Inc, Yokohama
THYME LEAVES—333 bls, E E Bier & Co, Alicante
91 bgs, M J Colombeck, Alicante
TONKA BEANS—25 bbls, Wessel Duval & Co, Ciudad Bolivar
TRIFOLIUM FLOWERS—25 bls, S B Penick & Co, Rijeka
TURMERIC—388 bgs, Mincing Trading Corp, Kingston
ULTRAMARINE BLUE—30 dms, Fezandie & Sperrie, Rotterdam
VANILLA BEANS—6 cs, Penna Banking Co, Dominica
VEGETABLE WAX—35 bgs, B M T Commodity Corp, Buenaventura
VETIVER OIL—1 dm, Van Ameringen Haebler, Port Au Prince
WHITING—250 bgs, R T French, Hamburg
WOOL GREASE—165 dms, Olympic Shipping Co, Genoa
82 dms, Robeco Chemicals Inc, Fremantle
3 dms, Genoa
ZINC CHLORIDE—42 dms, Riches Nelson, Antwerp
ZIRCON SAND—987 bgs, Ayrton Metal & Ore Corp, Brisbane
2,400 bgs, International Titanium Corp, Brisbane
1,200 bgs, Lo Curto & Funk, Brisbane

Los Angeles

AGAR—48 cs, Moorhead & Co, Yokohama
5 bls, Moorhead & Co, Kobe
AMMONIUM CHLORIDE—220 bgs, Irving M Sobin Co, Bremen
CALCIUM NITRATE—20,000 bgs, Wilson & Geo Meyer & Co, Oslo
5,000 bgs, Antwerp
5,000 bgs, Atkins Kroll & Co, Rotterdam
CARAWAY SEED—150 bgs, Richard J Spitz, Antwerp
50 bgs, Durkee Famous Foods, Rotterdam
CASSIA—33 bls, H M Newhall & Co, Djakarta
340 bls, Borneo Sumatra Trading Co, Djakarta
COPRA CAKE—4,240 bgs, Pacific Vegatable Oil Corp, Manila
4,480 bgs, Procter & Gamble Co, Manila
945 tons, Procter & Gamble Co, Dumaguete
263 tons, Procter & Gamble Co, Nasipit
2,240 bgs, Manila
415 tons, Manila
CUMIN SEED—539 bgs, Rotterdam
FISHLIVER OIL—50 dms, Interocean Chemical & Mineral Corp, Yokohama
GELATIN—25 bbls, Coignet Chemical Co, Antwerp
KARAYA GUM—100 bls, Hong Kong
MOLASSES—1,733 tons, National Molasses Co, Mazatlan
NICKEL CHLORIDE—5 casks, London
PEATMOSS—2,250 bls, Atkins Kroll & Co, Rotterdam
1,000 bls, Atkins Kroll & Co, Bremen
PEPPER, BLACK—63 pkgs, H M Newhall & Co, Singapore
84 bgs, Ziel & Co, Singapore
SEEDLAC—140 bgs, East Asiatic Co, Singapore
SODIUM NITRATE—14,412 bgs, Guaranty Trust Co, Tocopilla
ZINC DUST—20 dms, London
OXIDE—1,200 bgs, Frank P Dow Co, Middlesbrough

Philadelphia

AMMONIUM CHLORIDE—230 bgs, I M Sobin, Rotterdam
ANTIMONY REGULUS—96 cs, Sibenik
ASBESTOS FIBER—7,931 bgs, Chas Kurz & Co, Lourenco Marques
400 bgs, Rubberoid Co, Tanga
898 bgs, Chas Kurz & Co, Tanga
1,700 bgs, Tanga
BONE—538 bgs, A M Goldstein, Buenos Aires
CALCIUM PHOSPHATE, DIBASIC—2,204 bgs, Wessel Duval & Co Antwerp
CHESTNUT EXTRACT—1,500 bgs, Barkey Importing Co, Genoa
CHINA CLAY—7,849 tons, Fowey
CLAY—600 bgs, L A Salomon & Bro, Bremen
COCONUT OIL—349 tons, Cargill Inc, Manila
COD LIVERS—260 dms, Silmo Chemical Corp, St Johns
CRESYLIC ACID—141 dms, Concord Chemical Co, Rouen
125 dms, Glasgow
FUEL OIL—108,000 bbls, Atlantic Refining Co, Aruba
GYPSUM—6,108 tons, U S Gypsum Co, Hantsport
LICORICE ROOT—8,120 bls, Izmir
NAPHTHALENE—650 bgs, Gallard Schlesinger, Hamburg
581 bgs, Barrett Division, Rotterdam
OSSEINE—320 bgs, Kind & Knox, Antwerp
PEATMOSS—1,000 bls, Vandergrift Co, Bremen
200 bls, E Dunwoody, Bremen
PETROLEUM, CRUDE—315,900 bbls, Atlantic Refining Co, Puerto La Cruz
253,388 bbls, Atlantic Refining Co, Pamatacual
198,539 bbls, Shell Oil Co, Las Piedras
1,089,963 bbls, Gulf Oil Corp, Puerto La Cruz
198,539 bbls, Gulf Oil Corp, Las Piedras
122,797 bbls, Socony Mobil Oil Co, Covenas
274,618 bbls, The Texas Co, Covenas
134,555 bbls. The Texas Co, Puerto La Cruz
QUEBRACHO EXTRACT—1,429 bgs, Tanimex Corp, Buenos Aires
SULFUR, CRUDE—4,047 tons, Coatzacoalcos
TALC—550 bgs, Whittaker Clark & Daniels, Bordeaux
525 tons, D E Founce, Holy Road
TAPIOCA FLOUR—600 bgs Stein Hall & Co, Bangkok
UREA—500 bgs, Nylos Trading Co, Genoa
SYNTHETIC—400 bgs, Chemical Manufacturing Co, Glasgow
WATTLE EXTRACT—1,109 bgs, Durban
WHITING—4,362 bgs, Pluess Staufer, Antwerp
ZINC-AMMONIUM CHLORIDE—440 bgs, Indussa Corp, Antwerp

San Francisco

CARDAMOM SEED—20 bgs, Wm E Martin & Sons, San Jose
COPRA—1,800 tons, Cargill Inc, Cebu
90 tons, Manila
CAKE—1,000 bgs, Balfour Guthrie, Iloilo
NAPHTHOL—200 dms, Industrial Supplies Co, Hong Kong
PETROLEUM, CRUDE—276,183 bbls, Tidewater Oil Co, Bandar Mashur
120,000 bbls, Tidewater Oil Co, Vancouver
SODIUM CYANIDE—357 dms, C M C Chemicals Inc, London
UREA—12,500 bgs, Wilson & Geo Meyer & Co, Heroya
ZINC OXIDE—4,480 bgs, London

INTERNATIONAL SALES CHIEF: Robert Paul Blaine, named manager of international sales for Goodrich-Gulf Chemicals, Inc., Cleveland, Ohio.

P.A. Secretary Retires

James H. Leonard, for thirty-six years executive secretary of the Purchasing Agents Association of New York, has retired. He is succeeded by Robert H. A. Davis.

Data Offered

Matheson Coleman & Bell, Inc., East Rutherford, N. J., offers its 1957 **chemical catalog.** The new catalog lists over 4,000 chemicals manufactured and distributed by MC&B, including fine organics, inorganic reagents, indicators and certified biological stains. Copies may be obtained by writing to 2909 Highland, Norwood 12, Ohio, or East Rutherford.

A new two-page bulletin, **"Properties of Molybdenum Disulfide,"** has been issued by Climax Molybdenum Company, Dept. L, 500 Fifth avenue, New York 36, and is available on request. The publication covers the physical properties, electrical and magnetic properties, chemical and thermodynamic properties, and preparations and uses of molybdenum disulfide.

Fritzsche Brothers, Inc., has published a fifty-two page **"Pharmaceutical Flavor Guide"** for manufacturers of ethical and proprietary medicines. The reference manual covers about forty pharmaceutical groups. Accompanying each are selected flavoring recommendations. The guide is indexed and cross-referenced. Drug manufacturers may obtain copies of the guide free of charge by addressing their requests to Fritzsche Brothers, Inc., 76 Ninth avenue, New York 11.

Stein, Hall & Co. has published a twenty-page booklet on the **centrifuged natural hevea latex** which it markets under the trademark of "Unitex." The new booklet contains a complete description of the British Malayan product, produced in the factories of Guthrie Latex (Export), Ltd., and sold exclusively in this country by Stein Hall. Copies of the booklet are available on request to Stein Hall's latex and rubber department, 285 Madison avenue, New York.

The **regulations and by-laws of the fourth Pan-American Congress of Pharmacy and Biochemistry** have been compiled in a twenty-four page booklet. The international parley will be held November 3 to 9 in Washington, D. C. Copies of the booklet may be obtained by writing George B. Griffenhagen, executive secretary of the congress, at the Smithsonian Institution's Division of Medicine and Public Health, Washington 25, D. C.

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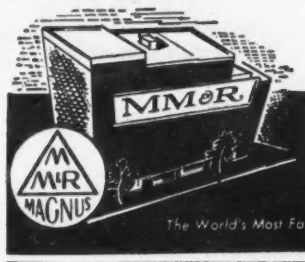

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Essential Oils, Aromatics

The market on the whole showed little activity last week, with a marked return to a position comparable to the inert one held during the final weeks of last year. Two materials move in listing: ginger oil and artificial sassafras (Camphor 1,070). The former advanced $1.50 per pound to a $21.50 listing. The rise is attributed to the tight supply condition of Jamaican newcrop ginger. The other grades, as a result of this position,, held tightly for the past weeks, have shared in the new strength. Sassafras moved up 2 cents per pound to 48 cents position. Though it has not moved in position for some little time, it had been strengthening during the past weeks.

High prices, according to one report, served to retard the demand for such ariticles as nutmeg, sandalwood and celery oils. In the case of nutmeg, however, there was very little material to be had and there didn't appear to be any signs of relief in the tight supply position. Clove oil joined several of the spice oils in stiffening in position. The cost of clove buds, from which the oil is distilled, has been steadily climbing. The mint oils have been displaying a slightly greater degree of stability since the beginning of the year. Over-all conditions of both spearmint and peppermint suggest a hardening trend in prices in the future since present stocks will have to carry consumer requirements for many months before new crops are again ready for cutting. Mace remains scarce with prices remaining at an all time high for the limited quantities available for prompt delivery. Outstanding in the citrus oil group is a firm tendency in one variety of cold pressed orange oil. While prices for orange oil have failed to show any change, consumers have been advised to the effect that a smaller quantity of the material was produced this year than was produced last year. The tighter supply position stems from a shrinkage in stocks as well as production.

The aromatic chemicals remained much as before, with sales showing some foreward movement, but not enough to suggest a trend. The seeds and spices continued to reflect the unrest in other parts of the world and the tightened shipping conditions. Paprika (Spanish) stiffened on spot as did nutmegs and Moroccan cummin seed. The nutmegs with mace continue to show great strength and there is nothing that will be able to move them from their entrenched positions, most dealers concede. Current listings for West Indian material climb up to $2.50 per pound listing for June delivery while East Indian material go to $2.35 for January/February shipment.

Price Trends

Advanced
Oil, ginger, $1.50 per lb.
Sassafras (artificial), 2c. per lb.

Reduced
None.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Jan. 20, 1956
145.36	145.21	138.25	135.36

For Current Prices see Page 9

Essential Oils

Ginger—This material moved up in spot last week, dealers here reported. The current listing is $21.50 per pound or $1.50 greater than the previous quote. The market for Jamaica ginger has stood at a good level for the past weeks. The position served to focus attention on the tight supply position of the Jamaica newcrop. Other grades shared in the interest with particular interest paid to spot and shipment Cochin ginger as it is said to be available well below comparable quality material quotes. The fact that India has been a consistent seller of Cochin for newcrop shipment ras depressed prices to a very cheap level, it was said. In view of the prospect of better availability as well as the reasonable price level some dealers suggest that this material is the best buy on the market at present. Newcrop Nigerian is at least 5c. higher than Cochin; newcrop African is also higher and Jamaican is also higher and Jamaican, of course, is high and climbing higher.

Bergamot—This material continued to show strength on the spot market last week, dealers here reported. Recent advances in spot quotations failed to deter the continued interest of buyers and the position of the market is expected to remain on a good firm plane. Initially the upward movement was restrained by supplies on spot, but once these were depleted, the listings climbed to their present level. No reversal in this trend is anticipated for some time.

Chenopodium—The conditions in this market continued firm despite a demand that is less than heavy. The present condition is attributed to a couple of dovetailing factors. Dealers, anticipated a good carryover of material at source, despite the reports of weak newcrop. However, the maaerial was held by strong hands at source and the situation on spot soon became one of tight supply and rising prices. The listings during this period shifted rapidly three times. At present, there are few offerings coming through. Though demand here continues to be listless (possibly as the result of information that there is material to be had) the price continues relatively firm and the feeling is that buyers and dealers will have to give way and adjust to the higher listing.

Lavender—English sources noted that in spite of the high price quoted for lavender oils, a large demand has been recorded and a substantial quantity of this year's production has already been absorbed. Therefore, should the demand remain slightly active, it would not be surprising, it was said, that the stock available be exhausted in the course of the first months of this year. It was noted, on the other hand, that lavender concretes and absolute were in good enough supply to cover all requirements until the 1957 crop. Spike lavender of both French and Spanish origin have continued to show growing strength. Small quantities of French continued available, it was noted and the price stood close to that of Spanish material. Spanish prices rose at the end of last year in the source listing.

Lemongrass—This oil appeared to remain at a relatively stable level last week, dealers here reported. The position of the market, one of easement prior to the Suez crisis has been one of varying strength for the past months, though the earlier progressive softening movement has ceased. As to what will develop remains to be seen. There is no question that a quantity of the material is available at source. Estimates of production earlier this year were high. With the shipping situation what it is at present time, however, the spot market must depend upon developments in that area.

Nutmeg — Dealers showed no expectations last week that this oil would reverse its strong trend on spot. Currently, the position of source material is extremely powerful with little supply available. This condition had been anticipated but not to the extent of the present situation. No new supplies can even be thought of until the newcrop period, still a good distance away. The only hope is that the market listings remain in sight and that the remainder of the supply, light as they are, be evenly distributed through the coming months.

Peach Kernel—This oil stood tight on the market last week, dealers here reported, with supply very limited. The current listing, a range of a $1 per pound

Imports Detained at N.Y.

Period Ended Jan. 11

Bitter Almonds, 60 bags.
Aniseed, 2 lots, 300 bags.
Black Pepper, 17 lots, 1,844 bags.
Carrajabeen Moss, 150 bags.
Cassia, 43 lots, 3,942 bags.
Chillies, 140 bags.
Cloves, 12 lots, 1,673 bags.
Coriander Seed, 2 lots, 600 bags.
Cumin Seed, 6 lots, 500 bags.
Fennel Seed, 2 lots, 475 bags.
Fenugreek Seed, 127 bags.
Gum Karaya, 2 lots, 30 bags.
Mace, 4 lots, 68 cases.
Nutmegs, 8 lots, 659 bags.
Poppy seed, 335 bags.
Sage, 2 lots, 571 bales.
Sesame Seed, 49 bags.
Turmeric, 4 lots, 388 bags.

Essential Oils

to a $1.05, has stood firm since last November. The current position was brought about, it was noted, through the hardening position of almond oil which, since the lifting of the government subsidy, has become more and more limited in supply. As the result of this, peach kernel and apricot kernel oil, utilized as replacements, have become very tight in supply themselves.

Rose—A local spokesman for the Bulgarian essential oil agency contended that the price of Bulgarian rose oil climbed, not as the result of political unrest in that country, but because the severe winter there damaged the rose gardens and cut production to nearly fifty percent less than was expected. The argument further noted that the sudden price advance (from $1,800 to $2,500 per kilo) was brought about by dealers holding their material from spot until the supply situation had become acute and then unloading at the heavily advanced

Sassafras—Artificial sassafras (camphor 1.070) shifted downward slightly in listing last week, dealers here reported. The new listing, 48c. per pound, is 2c. lighter than the previous quote. The material had been moving in this direction for a period previous.

Spearmint—While occasional offerings of this material have been reported at below current quoted listings, some of offerings are said to be oil from the second cutting of the last crop. The overall statistical position in both spearmint and peppermint suggests a continuation of its present position. Many of the larger users of spearmint and peppermint are reportedly fairly well covered on their anticipated requirements against contracts placed during the distillation period in September. As the result, remaining lots of unsold goods are smaller than had originally been anticipated.

Aromatic Chemicals

This material, reflecting the rest of the market, showed little tendency to move out of the turn-of-the-year lull, it was said here last week. Information was that movement was limited and production pared down to comparable proportions. Some pressure for buying is expected to awaken with the Easter season market, but this isn't necessarily expected to carry the market through to the hot weather demand period. As before, some materials have come into heavy demand because of limitations in the source field caused by the rising of the Middle Eastern and European crisis. These situations are not expected to face any reversals for some time to come.

Eugenol—This material declned in listing last week, dealers here reported. The current spot quote, $2 per pound, is 15c. less than the previous listing. The movement is attributed, it was noted, to a decline in cost.

Seeds and Spices

Nutmegs—Prices recovered sharply on the appearance of renewed interest in the New York market. There had been no fundamental change as far as sources are concerned but our market slipped off on profit taking. Once interest revived, however, holders were quick to advance their ideas more in line with replacement costs. It remains to be seen whether consumption will be maintained in view of present levels. There is no doubt that for the time being, at least, replacement demand has not been very important.

Paprika—There is no weakness in Spain's general level. Only very limited quantities of material are expected during the period between now and the next crop. Other sources are also said to be low in stock. Chile is reportedly cleaned out. Shipments from Yugoslavia are being meeting contractual obligations. Some supply is expected from Bulgaria and Roumania but todate, the shipments have not been made.

Pepper—The market moved irregularly during the week, dealers here reported. There seemed to be an undertone of firmness but at the same time actual business remained light and generally quotations could be shaded fractionally. Shipment offerings from India remained unchanged despite the absence of heavy buying from this side. The spread between spot and shipment prices continues extremely narrow. This is typical of a market that is in the process of absorbing a new crop. It should be remembered that at present India has no competition from Lampong or Sarawak as prices in Singapore are almost 2c. above those in India. Therefore, the problem of distributing the quantity of India has available is nowhere near as difficult as it might be. The world market is directed to India as it is the cheapest source of supply. On top of this, costs of importation continued to increase; a further increase in the freight rate to New York is expected in the middle of February.

Vanilla Beans—Dealers here continued to contend that this is a rising market. They base their argument upon the premise that the vanilla bean market has reached a turning point. Earlier estimates of the Mexican newcrop, placed at about 300,000 pounds, have been cut down, it was said. The crop is now estimated at about 250,000 pounds. It was also said that about half the new Bourbon crop slated to arrive about April has already been sold to buyers on spot and curers at source are reluctant to sell additional lots at current quotations. Producers in Mexico, it was noted, will probably not be able to meet the low prices that prevail here and in Madagascar. This information is based on the high prices paid by curers in Mexico for newcrop green beans. Prices recently (the end of last year) declined for Bourbon and Mexican material.

HEW Secretary Gets New Health, Medical Affairs Aid

Dr. Aims C. McGuinness of Philadelphia has been appointed special assistant for health and medical affairs to Secretary Marion D. Folsom of Health, Education and Welfare. He succeeds Dr. Lowell T. Coggshall of Chicago, who resigned at the end of last year.

Dr. McGuinness was given a recess appointment to the post and took the oath of office just before congress convened last Thursday. His appointment is subject to senate confirmation and his name will be submitted for such action shortly by the President.

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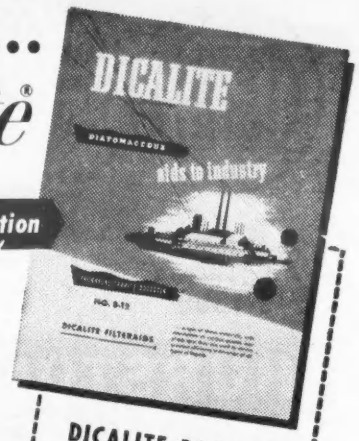

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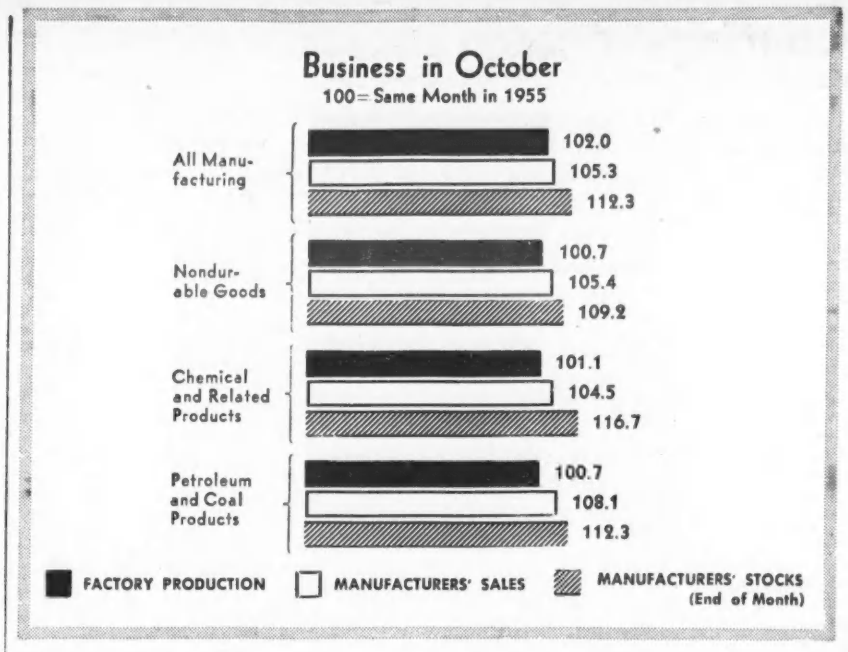

Inspection Is First

—Continued from page 7

750,000 acres were treated by the year's end. Counting repeated treatments, the aggregate number of acres sprayed totaled 5,802,953 on December 1, 1956. Even though victory is in sight, much control work continues to be necessary on this insect. The job is complicated by the fact that the Medfly attacks a hundred or more fruit and vegetable crops, it was pointed out.

As a result of work in the khapara beetle eradication program in the west during 1956, it is expected that the major clean-up phase of the program will be completed by June 30. Fumigation with methyl bromide is depended upon for eradication of this pest. Gas-tight tarpaulins large enough to encase grain storage buildings—some comprising as much as 5 million cubic feet—are used, USDA pointed out.

Fumigation methods were developed several years ago in the battle against Hall scale—a pest that attacks many different fruit trees. Fumigants penetrate cracks and crevices of the bark of infested trees.

The 1956 gypsy moth campaign marked the beginning of an all-out effort to eradicate this insect from New England and Michigan. Nearly a million acres were sprayed during the past year in the fight against this destructive forest pest.

The perennial campaign against grasshoppers—one of the country's most stubborn pests—saw some 2 million acres of rangeland in ten western states treated with insecticides.

Plans are being made for witchweed control work in the coming season. If this parasitic weed should become entrenched in the United States it might be more devastating than the European corn borer, which costs farmers about $100 million yearly. Although it is destructive and difficult to eradicate, USDA officials emphasize that it is by no means uncontrollable.

In the domestic plant pest detection program, interest in survey and trapping of insects is increasing rapidly as a guide to control. Such a program could better show the patterns of infestation and permit more accurate forecasts of outbreaks of insects the patterns of infestation and permit more accurate forecasts of outbreaks of insects and disease. Foreign insect invaders that escaped intereeption could be spotted sooner than is possible today, the report said.

Gen'l Aniline's

—Continued from page 3

left blank in the registration statement, apparently in compliance with an SEC rule that forbids solicitation of bids on a stock offering until the commission has made the registration effective. The commission normally does this twenty days after a registration statement is filed.

The registration statement estimated the value of General Aniline assets on October 31, 1956, at $160,506,835. General Aniline sales amounted to $121,247,877 in 1955 and totaled $108,564,211 in the first ten months of 1956. Net profits after taxes amounted to $4,216,963 in 1955 and $4,177,447 in the first ten months of last year.

Morpholine Output

—Continued from page 3

tion in 1957 will amply meet industry's mounting needs, Mr. Fogle added.

Morpholine is made from diethanolamine, which, in turn, is derived from ethylene oxide. The construction of new morpholine facilities is an integral part of a synchronized program of expansion in ethanolamines and ethylene oxide, Mr. Fogle said. A new ethanolamines unit has just been completed at the Seadrift, Tex., plant and Carbide's new ethylene oxide-ethylene glycol-polyethylene plant is now producing at Torrance, Calif.

The uses for morpholine that have prompted this expansion are diverse. For example, morpholine is a component of fugitive emulsifiers in rubless floor polishes that rapidly develop resistance to water-spotting.

Morpholine, as a corrosion inhibitor in boilers, evaporates with the water and protects return lines, too. In this application, it is used in many systems, including high pressure steam.

Morpholine is a raw material for rubber accelerators. Two well-known products derived from it are morpholine disulfide (4, 4' -dithio-dimorpholine) and N-morpholyl-2-benzothiozyl sulfonamide. These accelerators permit low sulfur curing and reduce "scorching" under the fast processing conditions employed in modern rubber production.

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Coatings Materials

By the middle of last week all major producers of tricresyl phosphate had conformed to the 2c. per pound reduction announced a week earlier by one maker. As explained by a producer, the move is intended to stimulate greater interest in TCP as a plasticizer and thereby improve its competitive position in relation to phthalates. Meanwhile, the price structure in octyl phthalates continued to show a soft tone, and one producer officially lowered its tankcar quotation to 28c. per pound. Although this price has been available in other quarters, there was no indication whether producers would follow this lead and make the reduction official.

A 2c. advance in stearates, announced earlier here, was made effective last Friday. Under the new schedule aluminum stearate is 39c. per pound in carlots and 40c. to 44c. per pound in smaller shipments; barium stearate is 41c. per pound in carlots and 42c. to 46c. per pound in less than carlots; while calcium stearate is 39c. per pound in carlots and 40c. to 44c. per pound in less than carlots. Business activity in these materials was still seasonally quiet last week. Increased costs of stearic acid, labor, containers and miscellaneous raw materials all figured in the price hike.

Production in fields involving use of coatings material is seasonally slow right now, and this is reflected in the sales volume of the last few weeks. Buying interest in plasticizers is fair, but in comparison with previous months the pace is slow. Sales of synthetic resins, pigments and gums are generally moderate.

Price Trends

Advanced

Casein, imp., Arg., ½c. per lb.
Gum, dammar, East India, black nubs and chips, ½c. per lb.
Stearates, 2c. per lb.

Reduced

Dioctyl phthalate, ½c. per lb.
Gum, copal, Manila C and DBB, ¾c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Jan. 20, 1956
100.78	100.79	100.29	100.10

For Current Prices See Page 9

Prime Pigments

Blues, Iron—Chinese, Milori, Prussian and Soda blues have been steady at the advanced prices established January 1. Carlot quantities are 52c. per pound, ton lots 53c. and less than ton lots 54c. per pound. Alkali-resisting types were raised to 57c. per pound for 23,00 pounds or more, 58c. per pound for ton lots, and 59c. per pound for 250 pound lots.

Blues, Organic — Newly established prices on a group of these pigments have been firmly maintained. These quotations, made effective January 1, are listed as follows:—Blue peacock, fugitive, 100 percent color strength, increased 5c. to 90c. per pound; victoria blue toner, PTMA, increased 20c. to $5.55 per pound, and PMA, increased 20c. to $4.50 per pound.

Cadmium Colors — Quotations were steady and unchanged against a seasonal volume of business. Selenide lithopones were tight but available for later shipment, while mercury lithopones continued in adequate supply. The latter colors have been steady in price since they were introduced to the market about a year ago. The last revision in selenides was implemented last Spring in response to a substantial boost in the price of selenium. Since the government's intentions concerning the continued stockpiling of selenium are in the category of classified information, there is no way of knowing how long the shortage of selenium will last. Meanwhile the position of mercury lithopones in the market is strengthening.

Lead Pigments—Business volume was reported to be fair for this time of the year. Prices of red lead in carlots continued unchanged at 19c. per pound for 95 percent material, 19.2c. per pound for 97 percent, and .1935c. for 98 percent. Quotations on l.c.l. shipments are 1c. per pound higher. White lead sells at 19c. per pound for basic carbonate, 17¼c. per pound for silicate and 17¼c. per pound for sulfate in carlots.

Organic Colors—With exception of the three specialty pigments mentioned below, the colors in this category that advanced, at the first of the year have been firm and unchanged at the new price levels. Most of these materials can be expected to hold steady through the balance of the year in conformity to the usual pattern in the industry. Barring major shifts in the cost of raw materials, producers tend to make price revisions on a yearly basis.

Despite the seasonal downturn in outdoor coatings sales, demand for organic colors has been satisfactory. Supplies are adequate.

Zinc Pigments—Prices of zinc oxide have been steady since the middle of the second quarter at the following levels:—American process, lead-free, 14½c. per pound; leaded, 35 percent, 15½c. per pound, 50 percent 15⅞c. per pound; French process, green seal, 15¾c. per pound; red seal, 15¼c. per pound, and white seal, 16¼c. per pound. Quotations in less than carlots are 1c. per pound higher.

The tone of the market last week was steady, with business holding to the moderate pace usually witnessed in a post-holiday period. Supplies are in good balance.

Lacquer Materials

Dicyclohexyl Phthalate — Quotations have held steady at the advanced levels established October 1. Lump material sells for 58c. per pound in carlots and 59c. per pound in less than carlots. Prices on granular are 1½c. higher. The demand level last week was moderate and supplies were plentiful.

Di-Iso Octyl Phthalate—One producer moved its official price down ½c. to 28c. per pound in tankcars. Although this price is and has been available in other quarters, there was no indication whether other makers would follow this lead and make the new price official. The last previous price change in DIOP was a substantial 2½c. per pound reduction across the board, prompted by competitive conditions in the market. The sales volume remained moderately good last week.

Dioctyl Phthalate—DOP was also moved down ½c. per pound last week by a leading maker. As in the case of DIOP the new price was finding general acceptance among producers, but official changes, matching the reduction, were not announced.

This price decrease, as well as the 2½c. reduction implemented on October 1, was stimulated by competitive conditions in the market. Although the market is constantly expanding, some observers point out that the number of producers is disproportional to the available consuming needs. In addition, the price is often weakened when resin makers who manufacture their own plasticizers find themselves with more DOP than they need and place the excess material on the market.

Sebacates—Consuming interest in this line of plasticizers was fair last week, and supplies were ample. In contrast to related materials, sebacates were steady in price last year and have continued to show a steady undertone.

Tricresyl Phosphate—All leading makers have joined in the 2c. per pound re-

Coatings Shipments, Output: November

	Factory shipments Dollars		Reported production Gallons	
	November	October	November	October
Trade sales	$66,208,000	$81,935,000	19,769,000	22,881,000
Industrial sales, total	55,280,000	58,374,000	20,634,000	21,742,000
Paint and varnish	40,919,000	43,678,000	15,021,000	16,027,000
Lacquer	14,361,000	14,696,000	5,613,000	5,715,000
Overall totals	$121,488,000	$140,309,000	40,951,000	45,301,000

Total sales January through November: $1,474,152,000.

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Coatings Materials

duction that was annonuced last week. As explained by one producer, the move is intended to stimulate greater interest in TCP as a plasticizer and thereby improve its competitive position in relation to phthalates. Some observers have attributed last year's declining TCP production to a loss in markets to phthalates.

Natural Resins

Copal Gum—Effective last Monday, Manila C and Manila DBB were reduced ¾c. per pound to 35½c. and 26c. per pound respectively. All other copal prices were unchanged at previous quotations. Pessimistic reports on negotiations between the striking longshoremen and the shipping companies have made some dealers here a bit uneasy about supplies, even though present levels are high enough to cover consuming needs for quite a while.

Freight rates on shipments from the Far East are to be advanced about 15 percent in February. As a result dealers expect replacement costs to rise about ¼c. to ½c. per pound. These increases would be passed along to consumers.

Dammar Gum—Quotations of East India black nubs and chips were moved up last Monday ½c. per pound to a range of 11½c. to 13c. per pound. On the same day, Singapore No. 3 dust was reduced ¾c. per pound, making the price range 16c. to 18c. per pound. These changes were reported to be a reflection of revisions in source prices.

Batavia dammars have been out of stock recently in the absence of consuming interest. Supply levels of other dammars were lower but still plentiful.

Shellac — Orange and refined grades continued to sell at a moderate but steady pace. Prices of the former were unchanged, but evinced a weak undertone in response to conditions at the source. Current quotations are 47c. per pound for lemon No. 1, 45c. per pound for No. 2, and 43c. per pound for superfine.

Naval Stores

Rosin, Gum
(USDA, per 100 lbs.)

	Fri. Jan. 11	Mon. Jan. 14	Tues. Jan. 15	Wed. Jan. 16	Thur. Jan. 17
Drums—					
F	$8.05		...	...	...
I		$8.15	...	...	...
K	8.11	8.15	...	...	...
M	...	8.20§	...	...	...
N	...		$8.20	...	...
WG	...	8.52§	8.53§	...	...
WW	8.86	8.86§	8.90	$8.93§	...
Bags—					
M	...	...	8.15	8.05	...
WG	...	...	8.40	...	...
WW	...	...	8.90	...	...

Tankcars (for week ended January 11)—M or better, $7.85; K or better, $7.84

Sales, USDA
429* 1,283* 2,174* 543* 240*

New York
(per 100 lbs., c.l., Friday)

Turpentine, Gum
(USDA, per gal., 7.2 lbs.)

Price	.587	...	.586§	.585	...
Sales	12,000¶	...	8,000¶	8,000¶	...

* Drums equivalent. ¶ Gallons. § Average price.

Miscellaneous

Casein—Offering prices were ½c. firmer last week at a range of 23c. to 23½c. per pound, for shipment during the month of February. Buying interest here was not aggressive, but conditions at source kept the market firm. In addition to Argentine casein some New Zealand material was available for later shipment. The major casein producing countries in Europe were still low on stocks, with imports running slightly above exports. Australian offerings were sparse and confined to late shipment.

Stearates—A 2c. advance in all stearates was put into effect last Friday to counterbalance the numerous increases incurred last year. Increased costs of stearic acid, labor, containers and miscellaneous raw materials all figured in the price hike, Under the new schedule aluminum stearate is 39c. per pound in carlots and 40c. to 44c. per pound in smaller shipments; barium stearate is 41c. per pound in carlots and 42c. to 46c. per pound in less than carlots; while calcium stearate is 39c. per pound in carlots and 40c. to 44c. per pound in less than carlots. Business activity in this field last week was still seasonally slow.

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Obituaries

William N. Davis

William N. Davis, founder and president of Davis Oil Company, which was sold three years ago to South Penn Oil Company, died January 15 in Olean, N. Y. He was sixty years old.

Mr. Davis was mayor of Olean from 1951 to 1953. His company operated oil properties near Bradford, Pa.

George Gilbert Argent, veteran salesman of Titanium Pigment Corporation, New York, a subsidiary of National Lead Company, died January 10 in St. Louis, Mo. He was sixty-three years old.

William N. Huse, vice-president of sales and marketing for Bon Ami Company, New York, died January 16 in Greenwich, Conn. He was forty-five years old.

Gratia C. Upjohn, wife of Dr. L. N. Upjohn, former president and now honorary chairman of the board of Upjohn Company, Kalamazoo, Mich., and mother of the present president, Dr. E. Clifford Upjohn, died January 9 in that city. She was eighty-two years old.

Homes Funnelled From Sky Seen on Plastics Horizon

Homes constructed of plastic materials funnelled from helicopters hovering over a building site will become a reality soon, reports Henry H. Reichhold, president of Reichhold Chemicals, Inc., White Plains, N. Y., in an industry forecast for 1957 and review of the past twelve months.

Walls and foundations of plastics will be poured through hoses from aircraft fitted with the type of equipment ordinarily used for cement mixing, Mr. Reichhold said.

He added that not only the homes, but the driveways would be of plastics which, inherently, offer an unlimited range of color. The driveways would be sprayed on by slow flying aircraft.

Carbide Will License

—*Continued from page 5*

samples by hand and analyze them periodically in fragile laboratory instruments. The laboratory method is very costly in many hours. There is a long time lag between sampling and final determination, and long intervals between samples are unavoidable. Carbide's analyzer automatically samples the gas at short time intervals and quickly registers the results. Deviations in quality can be rectified at once—automatically, if desired, it was pointed out.

Carbide's chromatographic analyzer differs from the laboratory procedure now in use. This analyzer continuously takes samples from a production stream, and records the analysis of the samples taken. Many years of experience contributed to engineering of the cycle valve—an essential part to the success of this analyzer—which must be rugged and reliable in sustained service,

Simplicity Belies Mechanism

The apparent simplicity of the recording apparatus belies an extremely complicated mechanism, delicate in its sensitivity yet rugged enough to operate on a twenty-four hour basis over long periods of time. Both components are patented parts of the instrument, Carbide explained.

The differential refractometer provides a continuous analysis of liquid streams by comparing the index of refraction of the liquid to a liquid of known index. While it is not expected to be used as extensively as the chromatographic analyzer, its applications will nevertheless be numerous and important, it was said.

The electrolytic concentration cell measures the difference between the ionic concentration of two liquids. This cell is useful in measuring trace amounts of certain gases. Thus far the cell has been used primarily in instruments which are capable of measuring parts per million of oxygen in plant streams.

Consulting Concern

—*Continued from page 5*

chusetts Institute of Technology and Cornell University.

Mr. Bayley was with the chemical advertising department of the *Journal of Commerce* for the past five years. Prior to that he was associated with Stauffer Chemical Company in sales and market development capacities. Earlier he was manager of sodium sulfate sales for F. W. Berk, Inc.

Dr. Frank held various technical posts with Fertilizer Sales, Ltd., London, England; Societe des Products Azotes, Paris, France, and Bayerische Stickstoffwerke, Berlin, Germany. For eighteen years he was associated with American Cyanamid Company and Chemical Construction Corporation. More recently he was a private consultant.

Dr. Parsons, at one time a staff member of MIT, is a recognized authority in the pulp and paper industry.

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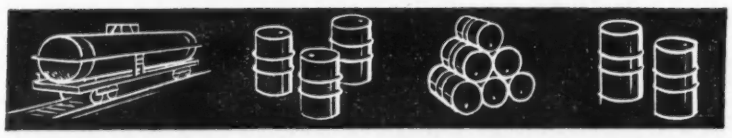

TANKCARS	C/L (DRUMS)	TON LOTS (DRUMS)	LESS TON (DRUMS)
18½¢	20½¢	21½¢	22½¢

Price subject to change without notice
West Coast price slightly higher

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SPECIFICATIONS		APPROXIMATE COMPOSITION	
F.F.A.	99-103	OLEIC ACID	95.0%
IODINE VALUE	84-90	LINOLEIC ACID	1.0
SAPONIFICATION VALUE	195-210	LINOLENIC ACID	0.0
TITER	3°-10° C	PALMITIC ACID	2.0
COLOR	3.5Y/0.3R MAX. 5 1/4" LOVIBOND	STEARIC ACID	2.0
			100.0%
POLYUNSATURATES	1-2%		

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Oils, Fats and Waxes

Sales of 16,000 tons of refined and 6,000 tons of degummed soybean oil for shipment to Spain were consummated last week. Following this business the market eased, but closed firmer and regained early losses. Cottonseed oil futures also declined while crude and refined cash oil remained steady. Corn oil remained firm while peanut was easier and dropped ½ cent per lb. Crude coconut was easy with heavy sales at lower levels. Copra was quiet and also lower.

Moderate demand for export kept tallow steady, while greases were moved at slightly lower levels. Soapers showed fair interest at reduced bids. Lard was irregular and closed steady.

Interest in drying oils continued slow last week. Tung oil was weaker and dropped fractionally. Brazilian castor oil also was softer and some business was booked at a fractional decline. Linseed oil price schedule was unchanged, but firm bids could have shaded quotations for sizable quantities. Refined fish was also shadable in tankcar lots. Interest in crude menhaden oil was slow for both export and domestic account and market was merely nominal at prevailing quotations. Oiticica oil trading was light, but market remained steady, reflecting the firmness of the Brazilian market. Olive oil was quiet, but steady on spot due in part to limited stocks and higher cost of shipment from Tunisia. Shipments from Spain were not available, but trade sources expected offers for shipment before the end of the month.

Quiet demand for carnauba and recent arrivals weakened yellow grades on spot. No. 1 Ceara was reduced 5 cents per pound and Parnahyba, 2 cents in some quarters. Stocks of Japan on spot were unsettled and dropped ½ cent per pound. Crude beeswax was also easy and trading was reported at 1 cent per pound lower.

Price Trends

Advanced

Linseed meal, $1 per ton.
Oil, cottonseed, crude, ½c. per lb.
refd., ½c. per lb.
Soybean meal, $5 per ton.

Reduced

Cocoa butter, 2c. per lb.
Copra, $4 per ton.
Oil, castor, No. 1, Braz., ¼c. per lb.
Coconut, crude, ¼c. per lb.
Peanut, crude, ½c. per lb.
refd., ½c. per lb.
Tung, ¼c. per lb.
Wax, bees, crude, 1c. per lb.
Carnauba, yellow Ceara, 5c. per lb.
Parnahyba, 2c. per lb.
Japan, 1c. per lb.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	Jan. 20, 1956
120.88	119.30	120.72	104.21

For Current Prices see Page 9

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, January 18, follow:

	Sales	High	Low	Close
		—Cents per pound—		
Mar.	414	17.24	16.72	17.01S
May	766	17.28	16.80	17.04S
July	735	17.25	16.75	17.03S
Sept.	138	16.97	16.62	16.87S
Oct.	86	16.36	16.05	16.36S
Dec.	54	16.19	15.97	16.19S
Mar. (1958)	17	16.25	16.09	16.15@16.25

Total sales and switches, 2,210 contracts.

Vegetable Oils

Castor—Domestic oil was in moderate demand for actual needs. All grades were quotably unchanged and steady. No. 1 Brazilian oil was offered at 22¼c. per pound, tankcars, New York, prompt delivery, with trading reported at ¼c. less.

Coconut — Crude oil was easier with heavy sales at 11¼c. per pound, tankcars, f.o.b. Pacific coast prompt. Tankcars were nominal at 12⅝c. New York basis.

Corn—This market remained firm. Crude was sold at 15c. per pound, tankcars, f.o.b. mills. Refined was unchanged at 18.66c. per pound, tankcars, New York, prompt.

Cottonseed—Futures market was strong and higher early last week, but gains were not sustained and the market closed practically unchanged for the period. May through September options reached new highs for the season which were not maintained as a result of weakness in western allied markets. Lower soybean oil was reflected in cotton oil futures, starting liquidation which erased advances made early. Trading was mixed, chiefly professional. Cash oils however, remained steady. Refined salad was slightly higher at 18⅜c. per pound, tankcars, New York, prompt delivery. Crude oil also was firm. Sales were reported at 14¾c. per pound, tankcars, southeast; 14⅝c., Valley and Lubbock, Texas and 15c. asked Waco.

Linseed—This market was dull and featureless. Raw oil was offered at 13.4c. per pound, tankcars, Minneapolis, January and February delivery. Firm bids could have shaded asked prices. Withdrawals of oil against current contracts continued quite active.

Flaxseed—Market quiet, but steady. Cash seed offers scarce.

Minneapolis.—Trading in cash flaxseed was almost negligible, buyers and sellers both holding to the side lines. Bids were unchanged at $3.40 a bushel, spot and to-arrive, basis Minneapolis, but crushers found it necessary to pay "edges" of 1c. to 3c. to obtain even minimum requirements. Indications were that inventories would be running down by the end of January and crushers might be forced to reenter the market at moderately higher levels. Curtailed operations contributed to drifting market the past fortnight. Trade noted the Agriculture department's report that as of December 15, a total of 13,145,991 bushels had been placed under the support price program, compared with only 7 million bushels a year ago. Arrivals of flaxseed for all accounts amounted to 265 cars, against 747 cars a year ago. Shipments totaled 22 cars, compared with 181 cars in the same period last year.

Receipts and shipments of flaxseed, in bushels, were as follows:

	Receipts		Shipments
	1956-57	1955-56	1956-57
Past week	473,400	1,307,250	39,600
Since Sept. 1	14,253,400	15,568,350	1,875,600

Oiticica—This market remained steady. Trading was spotty and offerings were closely held. Tankcars ranged from 15¾c. to 16¼c. per pound, New York, prompt and later delivery, depending upon seller.

Olive—Tunisian oil was firmer and shipments were raised to $76 to $77 per 100 kilos, c&f, New York. Oil from Morocco was also advanced to the same level. Trading on the spot continued light. Spanish was maintained at $3.50 to $3.60 per gallon, drums, duty paid, as to quantity. Offers for shipment from Spain were still unavailable.

Palm—Demand for oil on spot continued slow. Drums were unchanged at 15¾c. to 16¾c. per pound, spot, as to quantity. Tankcars were quoted at 13½c., New York, March delivery.

Peanut—Buying interest was light. Crude dropped to 17c. per pound, tankcars, f.o.b. mills, January shipment. Refined was inactive and lower at 19¾c. per pound, tankcars, New York, prompt delivery.

Rapeseed—Business was reported moderate. Tankcars were well held at 18¾c. per pound, tankcars, New York, prompt delivery.

Soybean—Crude Oil was irregular but closed firm following sales of 16,000 tons of refined soybean oil and 6,000 tons of degummed for export to Spain. Crude was sold at 14⅜c. bid per pound, tankcars, Decatur, January; 14⅛c., asked, February 13⅜c., March and 13⅝c., April. Refined salad stood at 17.46c. per pound, tankcars, New York, January.

Soybean Oil Futures

Sales and prices of crude soybean oil futures (new contract) in tankcars (60,000 pounds) on the New York Produce Exchange for the week ended Friday, January 18, follow:

	Sales	High	Low	Close
		—Cents per pound—		
Mar.	19	13.95	13.65	13.84S
May	4	13.76	13.40	13.54@13.60
July	13	13.60	13.25	13.40@13.41
Sept.	10	13.06	12.90	12.85@12.89

Total sales, 46 contracts.

Tung—This market was weak and fractionally lower. Tankcars were offered at 22¾c. per pound, New York, prompt delivery, and shadable on a firm bid. Drums

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Unsaponifiable	0.25%–0.50%
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Acid Value	250–257
Iodine Value (WIJS)	7–15

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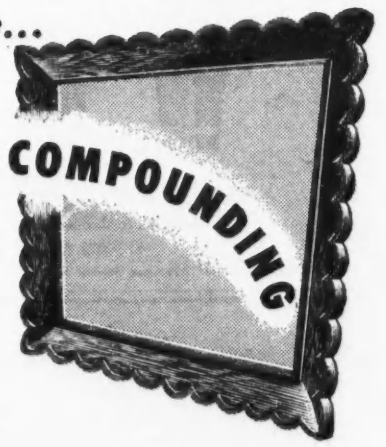

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Oils Fats and Waxes

were lower from 24¼c. to 24¾c., spot according to quantity.

Miscellaneous

Castor Beans—Offers for shipment were reported limited and entirely nominal at $180 per ton, f.o.b. Brazilian port.

Imports of castor beans, and castor oil at New York and Philadelphia last week were as follows:

	Beans	Oil
	Pounds	
Last week	567,600	2,310,000
Previous week	1,639,800	1,650,000
Corresponding week, 1956	1,625,750	1,080,000
Total this year	2,715,600	5,740,000
Corresponding period, 1955	6,983,600	5,106,000

Cocoa Butter—This market was weak and declined 2c. Stocks on spot ranged from 66c. to 70c. per pound, according to quantity.

Copra—Trading was quiet. Shipments were lower at $154 per ton, c.i.f. Pacific coast.

Fats and Greases

Greases—Slow demand created an easier tone in the market. Bids were reduced and quotations were more or less nominal. Choice white ranged from 8¼c. to 8⅜c. per pound, tankcars delivered. Yellow was offered at 6⅞c. to 7c., same basis, according to quality, with sales at 6¾c.

Lard—Market was steady and slightly higher. Cash lard was quoted at 15.65c. per pound, drums, Chicago.

Oleo Oil—Buying interest was confined to prompt requirements. Extra was quoted nominally at 19½c. per pound, drums. Oleo stearine was also nominal at 14½c. to 15c. per pound, drums, according to seller and quantity.

Tallow—Demand for export kept market steady. Soapers purchased bleachable at ⅛c. less. Bleachable fancy was held at 7⅞c. per pound; tankcars, delivered; prime, 7⅝c.; special, 7¼c. and No. 1, 7c., same basis. Guaranteed fancy was inactive and ranged from 9¼c. to 9⅜c. per pound, drums, f.a.s. as to position.

Tallow Futures

Sales and prices of bleachable tallow futures in tankcars (60,000 pounds) on the New York Produce Exchange for the week ended Friday, January 18, follow:

	Sales	High	Low	Close
		Cents per pound		
May	2	8.15	8.10	8.05@8.10
July	1	8.15	8.15	8.10@8.15

Total sales, 3 contracts.

Fish Oils

Cod—Trading was reported light on the basis of 10¾c. per pound, drums, exdock, prompt shipment. Market remaind steady. Drums on spot ranged from 11⅝c. to 11⅞c. per pound, as to quantity.

Menhaden Crude—Business continued quiet. Market was unchanged and nominal at 9¾c. per pound, tankcars, f.o.b. works. Export interest was reported slow. Refined oil was held at 11½c. per pound, tankcars, New York, basis.

Crude menhaden oil production was reported at 1,644,913 gallons in October, 1956, compared with 1,891,070 gallons, October, 1955. Output for ten months ending October totaled 19,725,575 gallons, against 19,450,850 gallons for the same period in 1954. Sardine oil Pacific Coast output in October was indicated at 267,122 gallons compared with 135,517 gallons, October, 1955, and 282,715 gallons for ten months ending October against 137,333 gallons for the same time in 1955.

Cake and Meal

Cottonseed Meal — This market remained steady. Relatively small tonnages were offered but sufficient to take care of the demand. Forty-one percent old process cottonseed meal was quoted at $57 per ton sacked Mississippi Valley; $57.50 basis Memphis, $62 basis Alabama-Georgia, $61.50 basis South Carolina mill points for January-February shipment.

Linseed Meal—Market stronger, up $1 per ton. Stocks for nearby delivery scarce.

Minneapolis.—Prices advanced $1 under influence of sharply curtailed production. Trade displayed increased interest though demand was not aggressive, holding generally to nearby requirements. Shipping directions were excellent, contributing to tight supply situation. Quotations for extracted linseed meal, 36 percent protein, were at $53.50 to $54 a ton for January/February; $52.50 to $53 for March forward. Expeller meal 32 percent protein, $59 for January forward.

Shipments of linseed meal, in pounds, were as follows:

	1956-57	1955-56
Past week	13,440,000	18,180,000
Since Sept. 1	291,240,000	339,010,000

Peanut Meal—Last week the government offered peanuts for crushing to produce approximately 4,000 tons of meal in the Alabama-Georgia area. Both domestic and export business has been slow, therefore sufficient supplies are available. Prices are holding about steady for 45 percent protein at $52.50 for old process, $50 per ton for solvent f.o.b. Georgia-Alabama mills January-February shipment.

Soybean Meal—Demand has been greater than the supply for January shipment and prices were lifted sharply. Most producers were sold up for January as well as a large percentage of February production. Consumption was running high. Forty-four percent was quoted at $52 per ton, Decatur, January, and $49 February through September shipment. Most of Mississippi Valley production 44 percent meal was sold for January-February but occasional lots are being offered at $52 bulk f.o.b. valley points.

Waxes—Buying interest in vegetable waxes continued restricted to actual needs last week. An easier tone prevailed in crude beeswax and quotations were off 1c. per pound. Trading was limited at the lower levels with stocks here still scarce. Trading in carnauba continued quiet. Prices were maintained for most grades, except No. 1 yellow. Ceara crude declined 5c. in some quarters to stimulate business to $1.38 to $1.40 per pound and Parnahyba 2c. to $1.44 to $1.46, spot as to seller and quantity. The Brazilian market continued firm and low bids for replacements were turned down. Lack of demand also weakened Japan wax and spot stocks were reduced 1c. to 46c. to 47c. per pound, as to quantity.

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$30 Million More Asked For Gov't Ore Purchases

President Eisenhower last week asked congress for a supplemental appropriation of $30 million to continue purchases of ore under the domestic tungsten, asbestos, fluorspar, and columbium-tantalum production and purchase law passed by congress last year.

The authorized program is estimated to cost approximately $91 million and is to terminate by December 31, 1958. An appropriation of $21 million in July, 1956, initiated the program and provided for purchases in the early part of the current fiscal year.

In asking for the additional funds, Mr. Eisenhower also suggested that the language of the law be changed so as to permit the Secretary of the Interior to accept offerings of ore made between December 1, 1956 (the approximate date on which certain purchases had to be stopped for lack of funds), and the date the additional funds became available.

Kennecott Kopper to Invest In Greek Asbestos Properties

Kennecott Copper Company will invest $8,350,000 in prospecting for asbestos and developing asbestos mining properties in the vicinity of Kozani, Greece. In accordance with terms of an agreement concluded with the Greek government last July, the company may export the material mined after setting aside 10 percent of it for domestic use.

Borden Picks Managers

Raymond J. Lodge and Charles W. Smith have been appointed department general managers for the chemical division of Borden Company, New York. Mr. Lodge now heads up the resins and chemicals department, and Mr. Smith, the polyco-monomer department. Eugene J. Sullivan, who had been top administrator for both departments, recently was advanced to general sales manager for the entire chemical division.

President Asks More

—*Continued from page 3*

it to expedite the safety clearance of new drugs and reduce its backlog of pending new-drug applications. Increased attention to the clinical evaluation of new drugs is also contemplated, as well as field investigations to determine compliance with provisions of existing new-drug applications.

Describing air pollution as a problem of growing national importance, the budget proposes a 50 percent increase in funds —a total of $4.1 million. Much of the proposed increase would be devoted to research on new and complex pollutants and to the search for better and more economical methods of measuring and controlling pollution.

Would Intensify Pollution Study

Studies on the effects of air pollution on health would be intensified, and more technical assistance and financial aid would be made available to state and local air pollution control agencies or to other public agencies concerned with air pollution control for demonstration projects. Programs for training personnel also would be expanded.

Exclusive of construction grants, the budget proposes $6.6 million for control of water pollution—a 57 percent increase. This would expand from $2 million to $3 million funds available for grants to state and interstate water pollution control agencies to help them conduct stream surveys, promote construction of treatment plants, and train personnel for pollution control programs.

Increased funds also were proposed for research and for collecting better factual data on the pollution of major waterways. For the actual construction of sewage-treatment works, $50 million in grants to municipalities—the same as in 1957—is requested.

Programs of the National Institute of Health, the principal research arm of the Public Health Service, have been greatly expanded in recent years. During fiscal year 1956, funds available to the institute for research, training, and related activities totaled $98.5 million. For the current year, congress has provided nearly double that amount, $183.2 million. The budget for 1958 recommends $190.2 million.

This includes $93.7 million for support of research projects outside the institutes and $34.5 million for training of research and related personnel. The greater part of the increase of approximately $7 million requested for 1958 would be used to more fully compensate institutions for the indirect costs of research projects supported by NIH grants. Heretofore, a maximum of 15 percent of the grant was allowed for such costs. Experience has shown that these costs actually may run to as much as 25 percent of the grant funds.

Atlas Breaks Ground

—*Continued from page 5*

few years, he said, Atlas plans to approximately double its research and development strength.

The technical center will provide extensive facilities for work across the entire range of applications served by Atlas products, including sorbitol, emulsifiers, detergents, polyester resins, activated carbons and explosives.

For the near future, Mr. Gottshall said, this will mean more technical help for the company's customer's on their own new problems. In the not-to-distant future, he said, the company hopes it will mean more and better Atlas products and services, both for the markets already served by the company and for other existing markets, as well as for new markets which may grow out of research.

Following completion of the new center, technical studies and product development activities now being carried on at the company's central research laboratory at Atlas Point, Del., will be transferred to the new building, along with personnel of the company's research and product development departments who are now located in the general offices. The building is designed to provide working space for 200 employees.

The company's chemical engineering department, which now operates pilot plant installations at the central research laboratory, will take over all of that facility after the other departments move. No production or pilot plant activities will be carried on in the technical center.

Both design and construction of the new building is being carried out by H. K. Ferguson Company, Cleveland, Ohio. The same firm built the company's general office building two years ago.

Atlas also operates the Reynolds Experimental Laboratory for explosives research near Tamaqua, Pa.; the Darco Experimental Laboratory at Marshall, Tex., for research on activated carbons; and the Aquaness department laboratory in Houston, Tex., for research on chemicals for the petroleum industry.

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1—Buflovak 6'x5'6" Monel single drum Flaker.
4—Stokes single door Vacuum Shelf with 8—44"x40" shelves.
3—Devine double door Vacuum Shelf 17 and 20—59"x78" shelves.
4—Tray Dryers, steam heated, 95 sq. ft. tray area.
3—Stokes Rotary Vac 4'x20', 30"x8', 18"x42".
1—Devine Rotating Vacuum 5'x10'.
3—Louisville Rotary Steam Tube 38"x25', 6'x40', 6'x50'.
6—Bartlett & Snow Rotary Dryers 6'x30', 7'x30', 8½'x35'.

MIXERS

2—Baker Perkins 100 and 50 gal., 316 S.S.. Sigma Blades.
5—Day "Cincinnatus" double arm 250 and 100 gals.
5—Steel jacketed Powder 50, 225 and 350 cu. ft.
1—Struthers-Wells 6'x9', 304 S.S. Rotating, jacketed.
1—Robinson 48"x7'6" long, 304 S.S. jacketed Powder, 90 cu. ft.
1—4' dia., 304 S.S. Conical Blender, 3 HP motor.

MILLS

1—Devine 5'x10' steel jacketed Ball Mill.
3—Abbe Paterson 6'x8' unlined Ball Mills.
3—Abbe 5'x6', 4'x5', 3'x3½' Silex lined Pebble Mills.
3—Mikro Pulverizer Bantam and #2TH.
1—National 6"x12" Two-Roll Mill, motor driven.
5—Jeffrey Hammermills 20"x12", 15"x8", motor driven, NEW.

CENTRIFUGES

2—Sharples C-27, C-20 Super-D-Hydrators 316 S.S.
1—Sharples PY-14 Super-D-Canter, 304 S.S.
5—Bird 32"x50". 316 S.S. solid bowl, continuous, fume tight, 60 HP TEFC motors, New 1953.
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2—Bird 18"x28", 24"x38" Stainless Steel, Continuous, Solid Bowl.
2—Tolhurst 40" Suspended Steel Perforated 15 HP XP motors.
1—Bird 40" Suspended rubber covered, imperforate basket.
2—Bird 40" Suspended 347 S.S. perforated basket, TEFC motor.
1—AT&M 36" center-slung; rubber covered, perforated basket.
1—Fletcher 30" center slung 304 S.S., Perforated basket.

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1—750 gal. nickel clad, jacketed, agitated Reactor, 75# pressure.
1—Pfaudler 500 gal. glass lined, jacketed, agitated Reactor, 75# pressure.
5—500 gal. 316 S.S. closed, jacketed Tanks.
1—3500 gal. 304 S.S. Horizontal Tank 5'6" dia. x 16' long.
3—Unused 2500 gal. Vertical rubber lined Tanks 7'x9'.
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1—10,000 gal. Aluminum Tank 10'x16', ½" shell, 25# W.P.
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2—Struthers-Wells 536 sq. ft. Heat Exchangers 304 S.S.
1—Struthers-Wells 536 sq. ft. Heat Exchanger 304 S.S.

FILTERS

1—Oliver 8'x10' Monel Rotary Vacuum.
1—Eimco 18"x12", 316 S.S. Rotary Vacuum.
2—Feinc 3'x1', 316 S.S. Rotary Vacuum with vacuum and receiving Tanks.
1—Feinc 5'x3' Monel Rotary Vacuum String.
1—Oliver 5'3"x8' Steel Rotary Vacuum, totally enclosed.
1—Niagara 230-32 Pressure Filter, 230 sq. ft., 304 S.S.
1—Niagara #95-36 Pressure Filter, 92 sq. ft.. 304 S.S.
2—#3 Sweetland Filters 304 S.S., 12-25" dia. leaves. 75 sq. ft.
1—#12 Sweetland Filter, 48 leaves, 3" centers, 640 sq. ft.
4—Shriver 36"x36", 30"x30", c.i. Filter Presses, P&F, washing.

MISCELLANEOUS

10—Orville Simpson Rotex Sifters 60"x84", 40"x84".
6—Robinson, Sprout Waldron, 304 S.S. Sifter, 40"x84" single deck.
7—Stokes DD2, DS3, D3, B2, "R" and "F" Tablet Presses.
1—Stokes #21J, 304 S.S. Granulating Mixer, NEW.
10—Nash Vacuum Pumps H7, H6. H5, L5, L4, TS7, #4, #2, AL-572.
2—Stokes #412G, 412B Vacuum Pumps, motor driven.
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2—Hills-McCanna K3M-2F Two Feed Metering Pumps, 3" x 3" and 5" x 3".

2—Lawrence T316 St. St. Sump Pumps, 5" x 4", 200 GPM.

1—Shriver 24" x 24" Filter Press, 15 ch.

1—Blaw-Knox K-15-600 Gas Cleaner, ASME 600# Pr.

1—Ozark-Mahoning Submerged Combustion Evaporator, 2,800.00 BTU/hr., type 316 St. St., with 1150 gal. T316 Evaporator Tank, 26" dia. x 62' T316 Stack, Air Blower and Gas Pump with motors, T316 Burners, controls, etc.

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1—30 gal. Hottman double shaft ribbon mixer with high speed knives, 25 HP.

1—Two Roll Saw Tooth Crusher, 8" x 18" long.

2—Spencer Turbo Compressors 350 cfm @ 32 oz. with carburetors.

4—R. C. Pos. Blowers 10"x15" and 8"x21".

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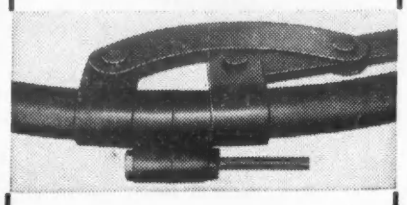

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1—Niagara Type 316 Stainless Steel Jacketed Filter, Model 45-30.

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1—Oliver Rotary Vacuum Filter 3′ x 6′, Rubber Covered.

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Fuel From Farm

—Continued from page 3

ies, hereafter entered into, be transmitted to the senate within sixty days.

Alcohol plant— S 581 by Sen. Roman L. Hruska of Nebraska, to provide for the transfer to the Department of Agriculture of the government's grain alcohol plant at Omaha, Neb.

Alcohol plant—HR 2628 by Rep. Carl Vinson of Georgia, to authorize the sale of the government-owned alcohol butediene plant at Louisville, Ky.

Alien property— S 600 by Sen. Olin D. Johnston of South Carolina, to amend the war claims act of 1948 and the trading with the enemy act to provide for the payment of certain American war damage claims.

Casein—HR 2577 by Rep. George A. Shuford of North Carolina, for the temporary suspension of import duties on casein.

Containers—HR 2458 by Rep. Eugene J. Keogh of New York, to allow containers for certain petroleum products and derivatives to be temporarily imported free of duty.

Dispersal—HR 2442 by Rep. Myron V. George of Kansas, to promote the dispersal of industrial facilities in the interest of national defense.

Drugs—HR 2498 by Rep. Antoni N. Sadlak of Connecticut, to regulate the manufacture, distribution, etc., of barbiturate and amphetamine drugs.

Engineers—HR 2450 by Rep. Elmer J. Holland of Pennsylvania, to amend the National Science Foundation act of 1950 to encourage the training of additional engineers.

Fuel oil—HR 2472 by Rep. Thomas E. Morgan of Pennsylvania, to establish quota limitations on imports of foreign residual fuel oil.

Graphite—HR 2783 by Rep. Alvin M. Bentley to provide for the free importation of amorphous graphite.

Health—HR 2435 by Rep. Peter Frelinghuysen of New Jersey, to provide for a Federal Advisory Council of Health in the Executive Office of the President in accordance with the recommendations of the Hoover Commission.

Imports— HR 2776 by Rep. Cleveland M. Bailey of West Virginia, to establish import quotas under specified conditions.

Industrial development—HR 2439 by Rep. Myron V. George of Kansas, to create a corporation to restore normal employment in labor surplus areas in group IV classification and produce industrial development in such areas.

Minimum wage—HR 2436 by Rep. Peter Frelinghuysen of New Jersey, to facilitate and expedite the making of minimum wage determinations and other interpretations by the Secretary of Labor under the Walsh-Healey act.

Polio—HR 2636 by Rep. Charles E. Bennett of Florida, to amend the poliomyelitis vaccination assistance act of 1955.

Pollution—HR 2463 by Rep. Glenard P. Lipscomb of California, to encourage the prevention of air and water pollution by allowing the cost of treatment works to be amortized at an accelerated rate.

Pollution—HR 2834 by Rep. Byron G. Rogers of Colorado, by amending the federal water pollution control act to remove a limitation on grants for construction of treatment works.

State laws—HR 2417 by Rep. William M. Colmer of Mississippi, to establish rules of interpretation governing questions of the effect of acts of congress on state laws.

Tanning materials—HR 2842 by Rep. William K. Van Pelt of Wisconsin, to permit the importation of tanning material extracts free of duty.

Tin—HR 2394 by Del. E. L. Bartlett of Alaska, to encourage the discovery, development and production of tin in the United States and its territories and possessions.

Vitamin A Dose Limitation

—Continued from page 3

offered over the counter, and that daily doses in excess of this amount should be administered only under supervision of a physician.

Details as to the labeling of the preparations are to be worked out later between the manufacturers and FDA.

The panel also went on record as favoring the practice of some manufacturers of packaging vitamin A preparations for children in small sized containers with a calibrated dispenser to insure accurate doses.

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Reply Box No. 226, Oil, Paint and Drug Reporter, 30 Church Street, New York 7, N. Y., describing in detail education and research experience in resin field.

Hydrocortisone Ointment

—Continued from page 4

mucous membranes adjoining skin areas following application to such areas of ointments and lotions containing the drugs.

b. There is insufficient evidence to establish conclusively whether or not the amount of hydrocortisone or hydrocortisone acetate that may be absorbed as a result of using ointment and lotion preparations as provided in the proposed exemption may cause clinically significant systemic effects or may result in disturbance to the glandular system.

c. There are documented cases of serious adverse effects following application of hydrocortisone preparations to the skin under medical supervision, particularly cases in which such preparations caused the spread of infection, the presence of which was undetected by the attending physician.

d. A number of well qualified experts believe that laymen in general cannot differentiate between skin conditions in which ointments or lotions of hydrocortisone or hydrocortisone acetate are indicated and those in which such preparations are contraindicated; in particular, this is a serious concern in relation to the possible spread of infection.

e. A number of well qualified experts believe that it is impossible to write adequate directions for use of hydrocortisone or hydrocortisone acetate ointments and lotions in self-medication, because the layman is generally incapable to diagnose the conditions in which the drugs may be indicated.

f. A number of well qualified experts offered the opinion that since hydrocortisone and hydrocortisone acetate ointments and lotions merely relieve temporarily but do not cure the conditions in which they are indicated, a layman would be expected to use the drugs beyond the time limit stated in the labeling in order to obtain continued relief of symptoms. It is generally agreed that prolonged use of that kind would increase the hazard of systemic effects from absorption.

g. There is a difference of opinion among well qualified medical experts as to whether or not hydrocortisone and hydrocortisone acetate ointments and lotions are safe and useful for self-medication.

3. There is general agreement that hydrocortisone and hydrocortisone acetate are not safe for use in self-medication, irrespective of the route or method of administration, if such medication causes or may cause clinically observable systemic effects or results in significant disturbance of the glandular system.

Commissioner's Conclusion

Based on a study of all the available fact and opinion, the Commissioner of Food and Drug finds:

"1. The available evidence fails to show that hydrocortisone and hydrocortisone acetate ointments and lotions are safe for use in self-medication as provided in the proposed regulation to exempt such articles from prescription-dispensing requirements.

"2. The evidence now available does not include adequate tests by all methods reasonably applicable to show whether or not such preparations are safe for use under the conditions proposed. In particular, it fails to include reports of tests sufficiently extensive to demonstrate adequately the range of absorption of hydrocortisone and hydrocortisone acetate through the skin and adjoining mucous membranes on application of such preparations to the skin. Further, it fails to include studies adequate to establish the significance of such absorption.

"In view of the above, the Commissioner of Food and Drugs cannot conclude that the drugs are safe for use as provided in the proposed regulation. It is concluded that the prescription-dispensing requirements of hydrocortisone and hydrocortisone acetate are necessary for the protection of the public health. Accordingly, the petitions to exempt hydrocortisone and hydrocortisone acetate ointments and lotions from prescriptions-dispensing requirements are denied."

Diamond Names Manager

Arthur B. Tillman, assistant works manager of operations of the Painesville, Ohio, plant of Diamond Alkali Company, Cleveland, Ohio, since August, 1955, has been promoted to the newly-created position of electro chemicals division operations manager.

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Packaging Exposition

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uct is expected to increase from its current rate of 2½ percent to close to 3 percent—a reflection of the growing number of new products coming into the market and new uses for packages.

He estimated that during 1956 the average per capita consumption of packages reached 1,500—ranging from cigarette packages to refrigerator cartons—without including cellophane and foil. The total US consumption was 250 billion units.

In meeting the consumer's packaging needs the industry uses 99 percent of the nation's cellophane production; 80 percent of its metal foil or about 7 percent of the aluminum industry's entire output; 70 percent of all glass other than flat glass; and 55 percent of the paper and paperboard output.

"Packaging is the dominant factor in today's self-service and self-selection markets," Mr. Warren said, "a market estimated to be between $50 and $60 billion. Some 375 exhibits at the AMA Packaging Show at Chicago's International Amphitheatre will offer increasing evidence of this trend with their emphasis on color, protection, lightness, and convenience in packaging to attract the consumer eye.

The effort to capture the consumer through the package will also be stressed at the accompanying AMA Packaging Conference to be held at the Palmer House. A. C. Nielsen, jr., executive vice-president of A. C. Nielsen Co., will discuss the elements that make packaging the dominant factor in today's consumer market and will show the effect of packaging on sales in both chain and independent retail stores.

The industrial side of packaging will be presented in a panel discussion by executives from Bendix Corporation, who will give a case history of industrial packaging as they practice it.

According to Mr. Warren, packaging is the major function of most businesses supplying the consumer with packaged goods. The manufacturer must evolve packages that are less costly to ship, reduce handling in stores and warehouses, sell and turnover faster, reduce spoilage and improve retailers' net profits. In line with this thinking H. J. Heinz Company, will discuss the latest techniques of modern consumer packaging and packaging processes in a panel presentation at the conference.

a Quiz that may save your life

Q. What is cancer?
A. An uncontrolled growth of cells. If permitted to spread through the body, it inevitably leads to death.

Q. Can cancer be cured?
A. Many types can be cured, but only if they are discovered and treated early.

Q. How can cancer be discovered in time?
A. By your doctor who has available many diagnostic tests.

Q. What is the American Cancer Society?
A. The only national voluntary agency which fights cancer by research, education and service to cancer's victims.

Q. What has it accomplished?
A. It helped save an American from dying of cancer on an average of every seven minutes last year.

Q. Does that mean it has solved the cancer problem?
A. Unfortunately, no. Despite the advances made, more than 235,000 Americans will die of cancer this year.

Q. Can I help to prevent this tragedy?
A. Yes. By having regular health examinations yourself. And by contributing to The American Cancer Society.

Q. What will my contribution be used for?
A. For research that may some day save your life, for education and for helping cancer's victims.

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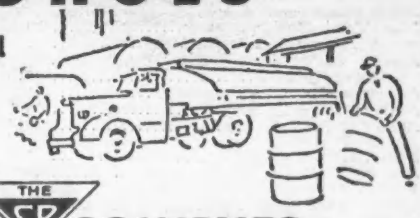

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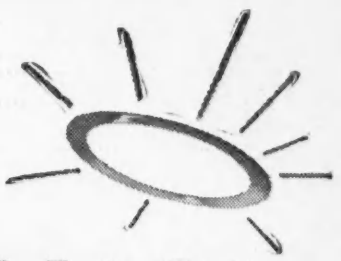

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